

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
IC5	1.5v .1a	EGGG- BE8D(11)	06431	05000	10.5v 17	1000	2,7		Gm Em*
IC6	2v .12a	EGAG- EE8D(23) BE8D(44)	64223 62413 64223 62412	50010 50000 50010 50000	2v 4.8v 12 26	625 260	1,6	G Cap - Amp. " " Osc. " " Amp. " " Osc.	Gm* Em* Em* Em*
IC7	2v .12a	EGAG- EE8D(23) BE8D(44)	06432 06231 06432 06221	25010 45000 25010 45000	2.1v 5.1v 12 26	650 275	2,7	G Cap - Amp. " " Osc. " " Amp. " " Osc.	Gm* Em* Em* Em*
IC21 ID3	0v 1.1v .28a	BE8D(9) EE83(9)	02004 10065	02000 00400	- 8	-	4,5	2,5,7 may short	Em*
ID5	2v .06a	EGAG- BE8D(30)	06430	05010	0v 13	475	2,7		Gm* Em*
ID7	2v .06a	EGAG- EGGG- EE8D(32) BE8D(44)	06432 06231 06432 06221	25010 45000 25010 45000	4.1v 14.1v 21 32	475 200	2,7	G Cap - Amp. " " Osc. " " Amp. " " Osc.	Gm* Em* Em* Em*
ID8	1.5v .1a	EGGG- BE8D(12) BE8D(37) FE8B(20)	06431 06231 06431 06222 06000	25000 45010 25000 45010 05400	13.1v 1.1v 23 10 -	575 350	2,7	Pentode G Cap - Triode Pentode G Cap - Triode Diode	Gm* Em* Em* Em* Em*
IE3	1.1v .2a	CGGG-	10056	00400	5v	2200	3,4,5		Gm*
IE4	1.5v .05a	EGGG- BE8D(18)	06401	05000	0v 9	825	2,7		Gm* Em*
IE5	2v .06a	EGAG- BE8D(30)	06430	05010	1.5v 13	525	2,7	G Cap	Gm* Em*
IE7	2v .24a	CGGG- BE8D(9)	06221 06412 06221 06412	45300 25300 45300 25300	2.2v 28	925	2,7	Pentode #1 " #2 " #1 " #2	Gm* Em* Em* Em*
IE8	1.1v .036a	DE8B(35) EE8B(15)	02056 01056	43100 24200	5 8	-	4,5	Amp. Osc.	Em* Em*
IF4	2v .12a	EGGG- BE8D(11)	64135	00000	2.5v 25	900	1,5		Gm* Em*
IF5	2v .12a	EGGG- BE8D(11)	06431	05000	1.2v 25	890	2,7		Gm* Em*
IF6	2v .06a	EGAG- BE8D(24) FE8B(20)	64300 60040 60004	50010 50000	.6v 22 -	425	1,6	G Cap-Pentode " " " Diode #1 " #2	Gm* Em* Em* Em*
IF7	2v .06a	EGAG- BE8D(24) FE83(20)	06400 06040 06004	35010 05000	.6v 22 -	425	2,7	G Cap-Pentode " " " Diode #1 " #2	Gm* Em* Em* Em*
IG3	1.1v .2a	GE8E(27)	06000	05004	-	-	2,7	P. Cap	Em*
IG4	1.5v .05a	EGGG- AE8B(22)	06401	05000	14.4v 14	525	2,7		Gm* Em*
IG5	2v .12a	EGGG- BE8D(11)	06431	05000	6.1v 18	975	2,7		Gm* Em*
IG6	1.5v .1a	EGGG- BE8D(13)	06001 06410 06001 06410	45000 05000 45000 05000	2v 22	425	2,7	Triode #1 " #2 Triode #1 " #2	Gm* Em* Em* Em*
IH4	2v .06a	EGGG- BE8D(14)	06401	05000	9v 13	575	2,7		Gm* Em*
IH5	1.5v .05a	EGGG- FE8B(45) FE8B(20)	06400	05010	2v 8 -	175	2,7	G Cap - Triode " " Diode	Gm* Em* Em*
IH6	2v .06a	EGGG- BE8D(37) FE8B(29)	06400 06040 06004	15000 05000	3.9v 7 -	375	2,7	Triode " " Diode #1 " #2	Gm* Em* Em* Em*
IJ3	1.1v .2a	GE8E(44)	05000	06000	-	-	2,7	P. Cap	Em*
IJ5	2v .12a	EGGG- BE8D(9)	06434	05000	9v 30	625	2,7		Gm* Em*
IJ6	2v .24a	EGGG- BE8D(17)	06001 06410 06001 06410	45000 05000 45000 05000	1.8v 12 -	650	2,7	Triode #1 " #2 " #1 " #2	Gm* Em* Em* Em*
IL4	1.5v .05a	EGGG- BE8D(22)	64306	15000	2.7v 16	660	1,5,7		Gm* Em*
IL6	1.5v .05a	EGAG- EE8B(44) BE8D(45)	54223 52413 54223 52412	16000 26000 16000 26000	1.4v .4v 5 21	510 420	1,7	Amp. Osc. Amp. Osc.	Gm* Em* Em* Em*
ILA4	1.5v .05a	EGGG- BE8D(13)	64300	10500	10.1v 25	525	1,8		Gm* Em*
ILA6	1.5v .05a	EGAG- EE8D(24) BE8D(44)	64223 62413 64223 62412	10500 20500 10500 20500	0v 1.9v 15 21	625 355	1,8	Pentode Osc. Pentode Osc.	Gm* Em* Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
ILB4	1.5v .05a	EGGG- BEED(17)	64300	10500	13.3v 15	580	1,8		Gm
ILC5	1.5v .05a	EGAG- BEED(37)	64320	10500	0v 11	480	1,5,8		Gm
ILC6	1.5v .05a	EGAG- EEED(19) BEED(37)	64223 62413 64223 62412	10500 20500 10500 20500	1.1v 4.9v 16 21	625 360	1,8 " "	Pentode Osc. Pentode Osc.	Gm
ILD5	1.5v .05a	EGAG- BEED(25) FEED(20)	64300 62240 64000	10500 20500 10500	0v 17 -	480	1,8 " "	Pentode Pentode Diode	Gm
ILE3	1.5v .05a	EGGG- BEED(18)	64002	10500	0v 9	825	1,8		Gm
ILF3	1.5v .05a	EGGG- BEED(18)	64002	10500	4.2v 9	775	1,8		Gm
ILG5	1.5v .05a	EGGG- BEED(30)	64320	10500	0v 13	650	1,5,8		Gm
ILH4	1.5v .05a	EGGG- EEED(45) FEED(20)	64000 62040 64320	10500 20500 10500	2v 8 -	180	1,8 " "	Triode Triode Diode	Gm
ILN5	1.5v .05a	EGGG- BEED(30)	64320	10500	1.1v 15	475	1,5,8		Gm
IN5	1.5v .05a	EGGG- BEED(37)	06430	05010	1v 15	490	2,7	G Cap	Gm
IN6	1.5v .05a	EGGG- BEED(15) FEED(33)	06431 06222	05000 45000	11.7v 21 -	525	2,7 " "	Pentode Diode	Gm
IP5	1.5v .05a	CGGG- BEED(40)	06430	05010	3.9v 13	525	2,7	G Cap	Gm
IQ5	1.5v .1a	CGGG- BEED(10)	06431	05000	7.4v 15	1325	2,7		Gm
IQ6	1.1v .04a	CGAG- EEED(24) FEED(20)	01065 00065	04300 40000	1.9v 10 -	325	4,5 " "	Pentode "	Gm
IR4	1.5v .15a	FEED(17)	50040	02600	-	-	1,8		Gm
IR5	1.5v .05a	EGAG- EGGG- FEED(36) AEED(36)	54325 52415 54325 52415	16000 26000 16000 26000	3v 13v 7 7	375 870	1,5,7 " "	Amp. Osc. Amp. Osc.	Gm
IS4	1.5v .1a	EGAG- BEED(12)	54135	46000	7v 15	975	1,2,5,6,7		Gm
IS5	1.5v .05a	EGAG- 3EED(30) FEED(22)	50034 50400	16000 06000	1v 15 0	400	1,7 " "	Pentode "	Gm
IS6	1.1v .04a	EGAG- BEED(18)	40165	00300	1v	375	5,6	Pentode	Gm
ISA6	1.5v .05a	EGAG- BEED(18)	06210	35400	0v 22	525	2,7		Gm
ISB6	1.5v .05a	EGAG- BEED(29) FEED(26)	06430 06004	05100 05000	5.1v 5 -	420	2,7 " "	Pentode "	Gm
IT4	1.5v .05a	EGAG- BEED(16)	54305	16000	0v 24	480	1,5,7		Gm
IT5	1.5v .05a	EGGG- BEED(12)	06431	05000	10.9v 25	725	2,7		Gm
IT6	1.1v .04a	EGAG- EEED(38) FEED(21)	40165 00065	20300 40000	1v 6 -	375	4,5 " "	Pentode "	Gm
IJ4	1.5v .05a	EGGG- BEED(26)	54305	16000	1.7v 16	575	1,5,7		Gm
IU5	1.5v .05a	EGGG- BEED(30) FEED(19)	54300 50040	16000 06000	6.8v 15 0	350	1,7 " "	Pentode "	Gm
IU6	1.5v .025a	EGAG- EGGG- FEED(23) AEED(50)	54323 53413 54323 53413	16000 26000 16000 26000	2.5v 0v 6 10	350 200	1,7 " "	Amp Osc Amp Osc	Gm
IV	6.3v .3a	AEED(4)	64250	00000	0	-	1,4		Gm
IV2	.6v .3a	GEED(22)	00065	00040	0	-	4,5	May show short on other pins.	Gm
IV5	1.1v .04a	CGAG- EEED(13)	01065	04300	5.4v 10	475	4,5		Gm
IV6	1.1v .036a	FEED(36) FEED(32)	00061 43160	45000 05000	6 6	-	4,7	Triode Pentode	Gm
IW4	1.5v .05a	EGGG- BEED(17)	54300	16000	13v 15	600	1,7		Gm
IW5	1.1v .04a	CGAG- EEED(18)	01065	04300	1v 9	475	4,5		Gm
IX2/IX2A	1.1v .2a	GEED(12)	06000	00054	0	-	1,2,4,5 6,8,9	P Cap-3,7 may short	Gm
IY2	1.5v .3a	GEED(17)	60000	05004	-	-	1,2,3,4,5,6,7	P. Cap	Gm
2A3	2.5v 2.5a	EGGG- BEED(5)	64150	00000	25v 34	1800	1,4		Gm
2A4	2.5v 2.5a	AEED(4)	06401	05000	0	-	2,7		Gm

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2A5	2.5v 1.75a	CGGG- BEED(9)	64312	50000	1.8v 27	1650	1,6		Gm Em*
2A6	2.5v .8a	BGGG- BEED(37) FEBB(20)	64002 60402 60042	50010 50000	1.1v 8 -	725	1,6	G Cap-Triode Diode #1 " #2	Gm* Em* Em*
2A7	2.5v .8a	BGAG- EGAG- EEDD(15) BEED(25)	64302 62341 64302 62241	25010 25000 25010 25000	1v 2.9v 35 18	1025 325	1,7	G Cap - Amp. " " Osc. " " Amp. " " Osc.	Gm* Gm* Em* Em*
2AF4	2.5v .62a	BGGG- AEF3(9)	41652	00000	7.5v 14	3100	1,2,3,4,6,7	P. Cap	Gm* Em*
2B3	1.5v .25a	GEDE(12)	05000	06004	-	-	1,2,7		Em*
2B4	2.5v 1.4a	AEED(3)	64225	00000	0	-	1,5	Thyratron	Em*
2B6	2.5v 2.25a	EGGG- BEED(20) BEED(7)	64310 60412 64001	25000 05000 25000	7v 15 26	1000	1,7	IN OUT	Gm* Em* Em*
2B7	2.5v .8a	EGGG- BEED(19) FEBB(20)	64300 60004 60040	25010 25000 25000	5.5v 17 -	650	1,7	G Cap-Pentode " " Diode #1 " " #2	Em* Em* Em*
2BN4	2.5v .6a	BGGG- EEF3(7)	21654	00000	2.2v 8	4200	1,2,3,4,6,7		Gm* Em*
2C21	6.3v .6a	EGGG-	60014	25000	8.6v	880	1,7	Triode #1 G Cap-Triode #2	Gm* Gm*
2C22	6.3v .3a	DGGG- BEED(7)	06000	05214	3.6v 24	1900	2,7	G Cap Top, P Cap Bottom	Gm* Em*
2C26	6.3v 1.1a	EGGG-	06000	05214	2.5v	1000	2,7	P Cap Top G Cap Bottom	Gm*
2C40	6.3v .75a	CGGG-	06200	05014	3.4v	1700	2,3,5, 7,8	P Cap Top G Cap Bottom	Gm*
2C50	12.6v .3a	EGGG-	14200 00014	05600 25600	12v	1100	7,8	Triode 1 Triode 2	Gm* Gm*
2C51	6.3v .3a	BGGG- BEED(8)	62000 62140 62000 62140	41250 00250 41250 00250	2v 13 13	3000	1,9	Triode 1 Triode 2 " 1 " 2	Gm* Gm* Em* Em*
2C52	12.6v .3a	BGGG- BEED(11)	02014 14202 02014 14202	25600 05600 25600 05600	.7v 21	975	7,8	Triode 1 " 2 " 1 " 2	Gm* Gm* Em* Em*
2CY5	2.5v .6a	BGAG- AEED(15)	12654	30000	1v 8	3800	2,3,4,7		Gm* Em*
2D21	6.3v .6a	GEDE(2)	12652	42000	0	-	3,4,5,7	Thyratron	Em*
2E5	2.5v .8a	EGGG-	64132	50000	1.3v	700	1,6	Eye Closed Eye Open	Gm*
2E22	6.3v 1.5a	DGGG-	63125	00004	0v	2500	1,5	P Cap	Gm*
2E24	6.3v .65a	DGGG- BEED(4)	06301	05004	7v 32	2100	1,2,4,6,7	P Cap	Gm* Em*
2E25	6.3v .8a	DGGG- BEED(9)	06031	05204	0v 29	1950	2,7	P Cap	Gm* Em*
2E26	6.3v .8a	DGGG- BEED(7)	26301	05004	8v 10	2000	1,2,4,6,7	P Cap	Gm* Em*
2E30	6.3v .65a	DGGG- BEED(9)	12654	30000	3v 18	1900	3,4,7		Gm* Em*
2E31	1.1v .05a	CGAG- EEED(30)	43615	00000	2.9v 5	325	3,5		Gm* Em*
2E32	1.1v .05a	CGAG- EEED(30)	43615	00000	2.9v 5	325	3,5		Gm* Em*
2E35	1.1v .03a	CGAG- EEED(30)	43615	00000	3.9v 5	325	3,5		Gm* Em*
2E36	1.1v .03a	CGAG- EEED(30)	43615	00000	3.9v 5	325	3,5		Gm* Em*
2E41	1.1v .03a	CGAG-	43061	50000	4.9v	260	4,6		Gm*
2E42	1.1v .03a	CGAG-	43061	50000	4.9v	260	4,6		Gm*
2G5	2.5v .8a	EGGG-	64132	50000	1.3v	700	1,6	Eye Closed Eye Open	Gm* Em*
2G21	1.1v .05a	EEED(25) EEED(29)	04152 40150	36000 06000	12 6	-	4,7	Heptode Triode	Em* Em*
2G22	1.1v .05a	EEED(25) EEED(29)	04152 40150	36000 06000	12 6	-	4,7	Heptode Triode	Em* Em*
2T4	2.5v .6a	BGGG- AEED(9)	41652	00000	7.7v 14	4400	1,2,3,4,6,7		Gm* Em*
2V2	2.5v .2a	GEDE(23)	06000	05004	-	-	2,4,5,6,7,8	P. Cap	Em*
2V3	2.5v 5a	GEDE(13)	06000	05004	-	-	2,7	P. Cap	Em*

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2W3	2.5v 1.5a	AE8B(8)	06040	00500	-	-	2,8		Em*
2X2A	2.5v 1.75a	BE8D(16)	60050	00004	0	-	1,4	P Cap	Em*
2Z2/G84	2.5v 1.5a	AE8B(9)	64050	00000	0	-	1,4		Em*
3A2	3v .22a	GE8E(13)	56000	00004	-	-	1,2,4,5,6,8,9	P Cap	Em*
		This is a low voltage test & is not a true indication.							
3A3	3v .22a	GE8E(20)	05000	06004	-	-	2,7	Plate Cap	Em*
		This is a low voltage test & is not a true indication.							
3A4	2.5v 1a	EGG- BE8D(10)	64310	45000	10v 15	1200	1,2,5,6,7		Gm Em*
3A5	3v .11a	EGG- BE8D(11) BE8D(11)	50001 64100 50001 54100	14600 05000 46000 06000	7v 7v 12	1250	1,4,7	Triode #1 " #2 " #1 " #2	Gm Em* Em* Em*
3A8	2.5v .05a	EGG- BE8D(29) BE8D(50) FE8B(20)	06430 06001 06430 06001 06000	05010 45000 05010 45000 05400	1.3v 17 12	475 325	1,2,7	G Cap - Pentode " " Triode " " Pentode " " Triode " " Diode	Gm* Gm* Gm* Em* Em*
3AF4	3v .45a	BGG- AE8B(9)	41652	00000	7.5v 14	3100	1,2,3,4,6,7		Gm Em
3AL5	3v .59a	FE8B(13)	20652 24652	04000 00000	0 0	-	3,4	Diode #1 " #2	Em* Em*
3AU6	3v .59a	BGG- BE8D(20)	12654	32000	0.8v 9	2500	3,4 3,4		Gm Em
3AV6	3v .59a	EGG- BE8D(26) FE8B(20)	12650	04000	1.3v 8 0	800	3,4	Triode " #1 Diode #2	Gm* Em* Em*
3B2	3v .22a	GE8E(23)	06000	05004	-	-	1,2,3,5,6,7,8	P. Cap	Em*
		This is a low voltage test and is not a true indication.							
3B4	2.5v .165a	EGG- BE8D(9)	30156	04000	15v 14	1050	2,4,5,6		Gm Em*
3B5	2.5v .05a	EGAG- BE8D(11)	06431	05000	6.1v 13	950	2,7,8		Gm Em*
3B7	2.5v .1a	CGG- BE8D(14)	60000 64100 60000 64100	14500 00500 14500 00500	6.1v 11	1950	1,4,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
3BA6	3v .59a	BGG- BE8D(12)	12654	32000	1v 18	2000	3,4		Gm Em*
3BC5	3v .59a	BGG- BE8D(26)	12654	32000	.5v 9	3200	2,3,4,7		Gm Em*
3BE6	3v .59a	BGAG- BGG- FE8D(20) BE8D(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 6 13	900 4500	3,4	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
3BN4	3v .45a	BGG- FE8B(9)	21654	00000	2.2v 8	4300	1,2,3,4,6,7		Gm* Em
3BN6	3v .59a	EGAG- CGAG- EE8D(38)	21653 22653 21653	24000 14000 14000	1.5v 2v 5	400 575	3,4	Limiter Quadrature	Gm* Gm* Em
3BU8	3v .6a	BGAG- EE8D(26)	23056 23456 23056 23456	01420 21000 01420 21000	0v 0v 7 7	600	4,5	Pentode 1 Pentode 2 " 1 " 2	Gm Gm* Em* Em*
3BY6	3v .6a	BGAG- EEAC(8) BE8D(35)	22564 12564 22564 12564	31000 32000 31000 32000	1v 1v 6 5	1000 500	3,4	Grid 3 " 3 " 3 " 1	Gm* Gm* Em* Em*
3BZ6	3v .6a	BGG- BE8D(23)	12654	32000	1v 6	3900	3,4		Gm* Em*
3C2	3v .175a	GE8E(10)	05000	06004	-	-	2,4,5,6,7,8	P. Cap	Em*
		This is a low voltage test and is not a true indication.							
3C4	2.5v 1a	CGG- BE8D(11)	54300	16000	11v 16	850	1,5,7		Gm*
3C5	2.5v .05a	BE8D(11)	06431	05000	16	-	2,7,8		Em*
3C6	2.5v .05a	EGG- BE8D(23)	60001 60410	40500 00500	.9v 1v 6	725 3900	1,7,8	Triode #1 " #2	Gm* Gm* Em*
3CB6	3v .59a	BGG- BE8D(23)	12654	32000	1v 6	3900	3,4		Gm* Em
3CE5	3v .6a	BGG- BE8D(23)	12654	30000	1v 7	3900	2,3,4,7		Gm* Em*
3CF6	3v .6a	BGG- BE8D(25)	12564	32000	.8v 5	3500	3,4		Gm* Em*
3CS6	3v .6a	BGAG- EEAC(15) EEAC(18)	22564 12564 12564	31000 32000 31000 32000	1v 1v 6 4	1000 500	3,4	Grid 3 " 3 " 3 " 1	Gm* Gm* Em* Em*
3CY5	3v .45a	BGAG- AE8B(15)	12654	30000	1v 8	3800	2,3,4,7		Gm* Em

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3D6	2.5v .1a	EGGG- BEED(12)	64300	10500	8v 11	1325	1,7,8		Gm
3DK6	3v .6a	BGGG- BEED(22)	12654	32000	1v 5	4400	3,4		Gm
3DT6	3v .6a	EGGG- EGAG- BEED(22)	12654 22654 12654	32000 31000 31000	3.5v 2v 11	350 300	3,4	Grid 1 2	Gm
3E5	2.5v .025a	EGAG-	54302	16000	5v	750	1,5,7		Gm
3E6	3.0v .05a	CGGG- BEED(19)	64320	10500	4.7v 13	1275	1,5,8		Gm
3LE4	2.5v .05a	EGGG-	64320	12500	14.8v	725	1,7,8		Gm
3LF4	2.5v .05a	EGGG- BEED(10)	64300	10500	5.5v 15	1225	1,7,8		Gm
3Q4	3v .05a	EGGG- BEED(12)	64130	05000	4v 16	1350	1,2,5,6,7		Gm
3Q5	2.5v .05a	EGGG- BEED(10)	06431	05000	8.2v 15	1150	2,7,8		Gm
3S4	3v .05a	EGAG- BEED(11)	64130	45000	6v 16	1000	1,2,5,6,7		Gm
3V4	3v .05a	EGGG- BEED(12)	54300	16000	6v 16	1250	1,5,7		Gm
4A6	4.3v .06a	CGGG- BEED(17)	06001 06410 06001 06410	45000 05000 45000 05000	7.2v 15	630	2,7,8	Triode #1 #2 #1 #2	Gm
4AU6	4.3v .45a	BGGG- BEED(14)	12654	32000	.8v 9	2500	3,4		Gm
4BA6	4.3v .45a	BGGG- BEED(12)	12654	32000	1v 18	2000	3,4	May light on other pins	Gm
4BC5	4.3v .45a	BGGG- BEED(26)	12654	32000	.5v 9	3200	2,3,4,7		Gm
4BC8	4.3v .6a	BGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	2v 10 10	4100	4,5	Triode 1 Triode 2 Triode 1 Triode 2	Gm
4BE6	4.3v .45a	BGAG- BGGG- EEED(20) BEED(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 6 13	900 4500	3,4	Amp. Osc. Amp. Osc.	Gm
4BN6	4.3v .45a	EGAG- CGAG- EEED(38)	21653 22653 21653	24000 14000	1.5v 2v 5	400 575	3,4	Limiter Quadrature	Gm
4BQ7A	4.3v .6a	BGGG- BEED(9) BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	2v 10	3100	4,5	Triode 1 2 1 2	Gm
4BS8	4.3v .6a	BGGG- EEBR(10)	00056 41256 00056	41220 00020 41220	1.5v 7 7	4500	4,5	Triode 1 2 1 2	Gm
4BU8	4.3v .45a	BGAG- EEED(26)	23056 23456 23056 23456	01420 21000 01420 21000	0v 0v 7 7	600	4,5	Pentode 1 Pentode 2 Pentode 1 Pentode 2	Gm
4BX8	4.5v .6a	BGGG- BEED(7)	00056 41256 00056 41256	41220 00020 41220 00020	5v 12 12	3000	4,5	Triode 1 2 1 2	Gm
4BZ7	4.3v .6a	BGGG- EEED(9)	00265 41265 00265 41265	41200 00200 41200 00200	2.7v 9	4000	4,5	Triode 1 2 1 2	Gm
4BZ8	4.3v .6a	BGGG- BEED(8)	00056 41256 00056 41256	41220 00020 41220 00020	1.6v 9 9	5000	4,5	Triode 1 2 1 2	Gm
4CB6	4.3 .45a	BGGG- BEED(23)	12654	32000	1v 6	3900	3,4		Gm
4CE5	4.3v .45a	BGGG- BEED(23)	12654	30000	1v 7	3900	2,3,4,7		Gm
4CY5	4.3v .3a	BGAG- AEED(15)	12564	30000	1v 8	3800	2,3,4,7		Gm
4DT6	4.3 .45	EGGG- EGAG- BEED(22)	12654 22654 12654	32000 31000 31000	3.5v 2v 11	350 300	3,4	Grid 1 Grid 2	Gm
5A6	5v .23a	DGGG- BEED(9)	40265	31000	12v 12	1900	3,4,5,8,9		Gm
5AM8	5v .6a	BGGG- BEED(25) FEED(13)	21356 20056	42200 02400	1v -	3900	4,5	Pentode Diode	Gm
5AN8	5v .6	BGGG- BEED(20) BEED(8)	00256 41256 00256 41256	43120 00020 43120 00020	1v 1.5v 5 10	3900 3800	4,5	Pentode Triode Pentode Triode	Gm

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
5AQ5	5v .62a	DGGG- 8EBD(8)	12654	31000	2v 24	2600	1, 3, 4, 7		Gm Em
5AR4	5v 1.9a	EEBB(6)	05040 05000	00600 40600	- -	- -	2, 8	Plate 1 Plate 2	Em Em
5AS4	5v .3a	AEBB(5)	06040 06000	00500 40500	- -	- -	2, 8	Plate # 1 Plate # 2	Gm Em
5AS8	5v .6a	BGGG- 8EBD(16) FEED(15)	31256 22256	22240 42220	1v 5	3900	4, 5	Pentode	Gm Em
5AT8	5v .6a	BGGG- BEED(26) BEED(10)	00256 14256 00256 14256	43210 00000 43210 00000	.5v 1.5v 9 9	3200 3500	4, 5	Diode Pentode Triode Pentode Triode	Gm Gm Em Em Em
5AU4	5v 4.5a	AEED(5)	06000 06040	40500 00500	- -	- -	2, 8	Diode 1 Diode 2	Em Em
5AV8	5v .6a	BGGG- BEED(21) BEED(10)	22256 21456 22256 21456	12340 22220 12340 22220	1v 1.5v 5 10	3500 2900	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5AW4	5v 4a	AEED(5)	06040 06000	00500 40500	- -	- -	2, 8	Plate # 1 Plate # 2	Em Em
5AX4	5v 2.5a	AEED(7)	06040 06000	00500 40500	- -	- -	2, 8	Plate #1 Plate #2	Em Em
5AZ4	5v 2a	AEED(7)	06040 06000	00500 40500	- -	- -	2, 8	Plate #1 Plate #2	Em Em
5B8	5v .6a	BGGG- CGGG- BEED(22) BEED(11)	20056 21456 20056 21456	12340 02020 12340 02020	1v 5v 5 7	3800 2000	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5BE8	5v .6a	BGGG- EEED(5) EEED(9)	00256 14256 00256 14256	43210 00000 43210 00000	.8v 1.1v 5 9	2400 4000	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5BK7A	5v .62a	BGGG- EEED(10)	00256 41256 00256 41256	41200 00200 41200 00200	1.2v 8	5300	4, 5	Triode #1 Triode #2 Triode #1 Triode #2	Gm Gm Em Em
5BQ7	5v .6a	BGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	2v 2v 10 10	3100	4, 5	Triode #1 Triode #2 Triode #1 Triode #2	Gm Gm Em Em
5BR8	5v .6a	BGGG- BEED(22) BEED(7)	22256 14256 22256 14256	43210 22220 43210 22220	1v 1v 9 18	2200 5000	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5BS8	5v .45a	BGGG- EEED(10) EEED(10)	00056 41256 00056 41256	41220 00200 41220 00200	1.5v 7 7	4500	4, 5	Triode 1 Triode 2 Triode 1 Triode 2	Gm Gm Em Em
5BT8	5v .6a	BGGG- BEED(27) FEED(15)	00056 40256 04256	43120 00000 00000	1v 5 -	3800	4, 5	Pentode Diode 1 Diode 2	Gm Em Em
5BZ7	5v .45a	BGGG- EEED(9)	00265 41265 00265 41265	41200 00200 41200 00200	2.7v 9 9	4000	4, 5	Triode 1 Triode 2 Triode 1 Triode 2	Gm Gm Em Em
5CG8	5v .6a	BGGG- BEED(26) BEED(10)	00056 14256 00056 14256	43210 00000 43210 00000	1.1v 2v 10 10	2850 3600	3, 4, 5, 8	Pentode Triode Pentode Triode	Gm Gm Em Em
5CL8	5v .6a	BGGG- BEED(13) BEED(7)	00056 14256 00056 14256	43210 00000 43210 00000	1v 1v 15 24	2800 5000	4, 5	Tetrode Triode Tetrode Triode	Gm Gm Em Em
5CM6	5v .6a	DGGG- BEED(11)	30156	02040	3.3v 11	2600	3, 4, 5, 6		Gm Em
5CM8	5v .6a	BGGG- CGGG- BEED(19) BEED(25)	01256 40056 01256 40056	43000 00210 43000 00210	1v 1.4v 7 9	3800 1260	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5C75	5v .6a	BGGG- BEED(7)	30156	02040	3.8v 15	3000	3, 4, 5, 6		Gm Em
5DH8	5v .6a	BGGG- CGGG- BEED(14) BEED(7)	00256 14256 00256 14256	43210 00000 43210 00000	.8v 1.7v 14 33	4400 2750	4, 5	Pentode Triode Pentode Triode	Gm Gm Em Em
5J6	5v .62a	BGGG- BEED(11)	04651 40650 04651 40650	02000 12000 02000 12000	2.5v 10	3300	3, 4	Triode Triode #2 Triode #1 Triode #2	Gm Gm Em Em
5R4	5v 2a	AEED(6)	06040 06000	00500 40500	- -	- -	2, 8	Plate #1 Plate #2	Em Em
5T4	5v 2a	AEED(5)	06040 06000	00500 40500	- -	- -	2, 8	Plate #1 Plate #2	Em Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
5T8	5v .62a	EGGG- BEED(34) FEED(12)	00256 " " " "	02140 42000 02000	1.3v 7 0	700 - -	4.5 " " " "	Triode " " Diode #1	Gm* Em Em*
		" "	04256 40256	02000 02000	" "	- -	" " " "	" " " "	Em* Em*
5U4	5v 3a	AEED(5)	06040 06000	00500 40500	- -	- -	2.8 " "	Plate #1	Em* Em*
5U8	5v .62a	BGGG- " "	01356 40056	42200 02210	1v " "	2200 5000	4.5 " "	Pentode Triode	Gm* Gm*
		BEED(22) BEED(7)	01356 40056	42200 02210	9 18	- -	" " " "	Pentode Triode	Em Em*
5V3	5v 3.8a	AEED(5)	06020 06040	40500 20500	- -	- -	2.8 " "	Diode 1 Diode 2	Em* Em*
5V4	5v 2a	AEED(3)	06040 06000	00500 40500	- -	- -	2.8 " "	Plate #1	Em* Em*
5V6	5v .62a	DGGG- BEED(8)	26431 " "	05200 " "	3.2v 22	2625 -	2.7 " "	" "	Gm Em*
5W4	5v 1.5a	AEED(8)	06040 06000	00500 40500	- -	- -	2.8 " "	Plate #1	Em* Em*
5X4	5v 3a	AEED(6)	00400 00004	05600 " "	- -	- -	7.8 " "	Plate #1	Em* Em*
5X8	5v .6a	BGGG- " "	20056 21456	21340 20000	1v 2v	3000 3500	4.5 " "	Pentode Triode	Gm* Gm*
		BEED(23) BEED(9)	20056 21456	21340 20000	6 10	- -	" " " "	Pentode Triode	Em Em*
5Y3	5v 2a	AEED(7)	06040 06000	00500 40500	- -	- -	2.8 " "	Plate #1	Em* Em*
5Y4	5v 2a	AEED(7)	00400 00004	05600 05600	- -	- -	7.8 " "	Plate #1	Em* Em*
5Z3	5v 3a	AEED(6)	64050 60450	00000 " "	0 " "	- -	1.4 1.4	Plate #1	Em* Em*
5Z4	5v 2a	AEED(3)	06040 06000	00500 40500	- -	- -	2.8 " "	Plate #1	Em* Em*
6A3	6.3v .1a	DGGG- BGGG(5)	64150 64150	00000 00000	25v 34	1800 -	1.4 " "	" "	Gm* Em*
6A4	6.3v .3a	EGGG- BEED(9)	64135 " "	00000 " "	5v 21	1200 -	1.5 " "	" "	Gm* Em*
6A5	6.3v 1.25a	DGGG- BEED(5)	06401 " "	05000 " "	25.9v 35	1900 -	2.7, 8 " "	" "	Gm* Em*
6A6	6.3v .8a	CGGG- " "	60021 64120	45000 05000	2.2v " "	975 -	1.7 " "	Triode #1	Gm* Em*
		BEED(7)	60021 64120	45000 05000	29 " "	- -	" " " "	" " " "	Em* Em*
6A7	6.3v .3a	BGAG- EGAG- BEED(14)	64302 62341 64302	25010 25000 25010	1v 2.9v 35	1000 325 -	1.7 " "	G Cap - Amp.	Gm* Em*
		BEED(25)	62241	25000	18	-	" "	" " Osc.	Em*
6A8	6.3v .3a	BGAG- EGAG- BEED(18)	06432 06231 06432	05210 45200 05210	1v 2.9v 20	1025 325 -	2.7 " "	G Cap - Amp.	Gm* Em*
		BEED(21)	06221	45200	25	-	" "	" " Osc.	Em*
6AB4	6.3v .15a	CGGG- BEED(9)	40650 " "	12000 " "	2v 21	2500 -	3.4 " "	" "	Gm* Em*
6AB5/6N5	6.3v .15a	EGGG- " "	64132 60132	50000 " "	1.3v " "	- -	1.6 " "	Eye Closed	" "
6AB6	6.3v .5a	CGGG- BEED(9)	06431 " "	05200 " "	1v 26	900 -	2.7 " "	Eye Open	" "
6AB7	6.3v .45a	CGGG- BEED(16)	06212 " "	35400 " "	2v 8	2225 -	2.7 " "	" "	Gm* Em*
6AB8	6.3v .3a	CGGG- CGGG-	00265 41265	42310 00000	4v 5v	2000 850	4.5 " "	Pentode Triode	Gm* Em*
6AC5	6.3v .4a	EGGG- BEED(7)	06401 " "	05200 " "	0v 30	640 -	2.7 " "	" "	Gm* Em*
6AC6	6.3v 1.1a	EGGG- BEED(7)	06431 " "	05200 " "	0v 20	1500 -	2.7 " "	" "	Gm* Em*
6AC7	6.3v .45a	BGGG- BEED(19)	06212 " "	35400 " "	1.6v 5	3175 -	2.7 " "	" "	Gm* Em*
6AD4	6.3v .15a	BEED(28)	10602 " "	50400 " "	5 " "	- -	3.6 " "	" "	Em*
6AD5	6.3v .3a	BEED(27)	06401 " "	05200 " "	8 " "	- -	2.7 " "	" "	Em*
6AD6	6.3v .15a	CGGG- " "	06413 06143	05200 05200	0v 0v	- -	2.7 " "	Eve 2 Closed	Em*
		" "	" "	" "	" "	" "	" "	Eve 1 Closed	Em*
6AD7	6.3v .85a	EGGG- " "	06431 16200	25200 45200	5.2v 0v	1275 375	2.7 " "	Pentode Triode	Gm* Em*
		BEED(9)	06431	25200	24	-	" "	Pentode	Em*
		BEED(17)	16200	45200	21	-	" "	Triode	Em*
6AE5	6.3v .3a	EGGG- BEED(6)	06401 " "	05200 " "	25.4v 20	750 -	2.7 " "	" "	Gm* Em*
6AE6	6.3v .15a	EGGG- " "	06241 " "	05200 " "	0v " "	475 550	2.7 " "	Triode #1	Gm* Em*
		BEED(30)	" "	" "	11	-	" "	" #2	Em*
		BEED(34)	" "	" "	" "	-	" "	" #2	Em*
6AE7	6.3v .5a	EGGG- " "	06420 06412	15200 25000	7.5v " "	950 " "	2.7 " "	Triode #1	Gm* Em*
		BEED(7)	06422 06412	15200 25200	27 27	- -	" " " "	" #2	Em* Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6AF4	6.3v .225a	BGGG- AE8B(9)	41652	00000	7.5v 14	3100	1, 2, 3, 4, 6, 7		Gm*
6AF5	6.3v .3a	EGGG- 8EBD(7)	06401	05200	15.4v 15	950	2, 7		Gm* Em*
6AF6	6.3v .15a	EGGG- "	05334 05224	06200 06200	- -	- -	2, 7 2, 7	Eye Closed Eye Open	* *
6AG5	6.3v .3a	CGGG- 8EBD(27)	12654	30000	1.7v 7	2500	2, 3, 4, 7		Gm*
6AG7	6.3v .65a	3GGG- 8E3D(11)	26012	35400	1v 9	6025	2, 7		Gm* Em*
6AH4	6.3v .75a	3GGG- AE8B(6)	16004	05200	11v 15	3500	2, 7		Gm* Em*
6AH5	6.3v .9a	BGGG- 8E3D(8)	36040	15200	3v 14	3750	2, 7		Gm* Em*
6AH6	6.3v .45a	BGGG- 8EBD(18)	12654	32000	.5v 6	5600	3, 4		Gm* Em*
6AH7	6.3v .3a	CGGG- CGGG- 8E3D(9)	00021 12400 00021 12400	45600 05600 45600 05600	3.9v 20 -	1500 " "	7, 8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
6AJ4	6.3v .225a	BGGG- AE8B(14)	12004	06500	2v 13	6500	1, 3, 4, 6, 7, 8, 9		Gm* Em*
6AJ5	6.3v .175a	CGAG- 8EBD(13)	12654	30000	2v 9	1700	2, 3, 4, 7		Gm* Em*
6AJ7	6.3v .45a	BGGG- 8EBD(19)	06212	35400	1.6v 5	3175	2, 7		Gm* Em*
6AK4	6.3v .15a	CGGG- AE8B(14)	10502	62400	5v 8	2400	3, 6		Gm* Em*
6AK5	6.3v .175a	BGGG- 8E3D(12)	12654	30000	2v 13	3100	2, 3, 4, 7		Gm* Em*
6AK6	6.3v .15a	EGGG- 8EBD(9)	12654	32000	3v 24	1300	3, 4		Gm* Em*
6AK7	6.3v .65a	3GGG- 8E3D(11)	26012	35400	1v 9	6025	2, 7		Gm* Em*
6AL5	6.3v .3a	FEBB(13)	20652 24652	04000 00000	0 0	- -	3, 4	Diode #1 #2	Em* Em*
6AL6	6.3v .9a	DGGG- 8EBD(8)	02031	05204	3.6v 14	3150	2, 7	P Cap	Gm* Em*
6AL7	6.3v .15a	FGGG- "	06403 06431 06413	15200 05200	Vary "	- -	2, 7 "	Vary Bias "	Em* Em*
6AM4	6.3v .225a	BGGG- 8EBD(14)	12004	06500	1v 9	5500	1, 3, 4, 6, 7, 8, 9		Gm* Em*
6AM8	6.3v .45a	BGGG- 8EBD(25) FEBB(15)	21356 20056	42200 02400	1v 4 -	3900 " -	4, 5 " "	Pentode Pentode Diode	Gm* Em* Em*
6AN4	6.3v .225a	BGGG- 8EBD(8)	41652	00000	1v 18	5000	1, 2, 3, 4, 6, 7		Gm* Em*
6AN5	6.3v .45a	BGAG- 8EBD(7)	12654	32000	.5v 9	5000	2, 3, 4, 7		Gm* Em*
6AN6	6.3v .2a	FEBB(20) " "	60004 60040 60400 64000	25000 25000 "	- - -	- - -	1, 7 " "	Diode 1 " 2 " 3 " 4	Em* Em* Em* Em*
6AN8	6.3v .45a	BGGG- 3EBD(15) 8EBD(10)	00256 41256 00256 41256	43120 00020 43120 00020	1.0v 1.5v 7 10	3900 2900 "	4, 5 " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em*
6AQ5	6.3v .45a	DGGG- 8EBD(8)	12654	31000	2v 24	2600	1, 3, 4, 7		Gm* Em*
6AQ6	6.3v .15a	EGGG- 8EBD(23) FEBB(20)	12650 02654 02650	04000 00000 40000	.1v 9 0	725 " "	3, 4 " "	Triode Diode #1 #2	Gm* Em* Em*
6AQ7	6.3v .3a	EGGG- 8E3D(24) FEBB(17)	02014 02400 42000	25600 " "	1.4v 10 -	650 " -	7, 8 " "	Triode Diode #1 #2	Gm* Em* Em*
6AR5	6.3v .4a	EGGG- 8EBD(9)	12654	30000	2v 22	1500	3, 4		Gm* Em*
6AR6	6.3v 1.2a	DGGG- 8EBD(7)	20403	51600	9v 11	3400	6, 8		Gm* Em*
6AR8	6.3v .3a	BEBD(50)	11356	12400 12040	5 "	- -	4, 5	Plate #2 #1	Em* Em*
6AS5	6.3v .8a	BGGG- 8EBD(7)	21651	34000	10v 9	3500	2, 3, 4, 5		Gm* Em*
6AS6	6.3v .175a	CGGG- 8EBD(26)	12654	32000	1.8v 8	1400	3, 4		Gm* Em*
6AS7	6.3v 2.5a	DGGG- BEBD(5)	02014 14202 02014 14202	25600 05600 25600 05600	39v " 21 "	1800 " "	7, 8 " "	Triode #1 " #2 " #1 " #2	Gm* Em* Em* Em*

For Gas, test as in regular gas test except that switch "D" is rotated to "B".

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6AS8	6.3v .45a	BGGG- BEED(16) FE3B(15)	31256 22256	22240 42220	1v 5 -	3900 - -	4,5 " "	Pentode Diode	Gm* Em* Em*
6AT6	6.3v .3a	EGGG- BEED(23) FE3B(19)	12650 02650 02654	04000 40000 00000	1.5v 9 0 "	800 - - -	3,4 " " "	Triode Diode #1 #2	Gm* Em* Em* Em*
6AT8	6.3v .45a	BGGG- BGGG- BEED(26) BEED(10)	00256 14256 00256 14256	43210 00000 43210 00000	1.5v 1.5v 9 9	3200 3500 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em*
6AU4	6.3v 1.8a	EEBB(4)	22224	26500	-	-	7,8		Em*
6AU5	6.3v 1.25a	DGGG- BEFE(5)	16204	05300	10.9v 12	3275	2,7		Gm Em*
6AU6	6.3v .3a	BGGG- BEED(20)	12654	32000	.8v 9	2500	3,4		Gm* Em*
6AU7	6.3v .3a	CGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	3v 16 16	2000 - -	4,5,9 " " "	Triode 1 2 1 2	Gm* Gm* Em* Em*
6AU8	6.3v .6a	BGGG- BEED(20)	21456 00056 21456 00056	00000 21340 00000 21340	1v 5 "	2000 3000 - -	4,5 " " "	Triode Pentode Triode Pentode	Gm* Gm* Em* Em*
6AV5	6.3v 1.2a	DGGG- BEED(6)	16204	05300	13.9v 7	2475	2,7		Gm Em*
6AV6	6.3v .3a	EGGG- BEED(26) FE3B(20) FE3B(20)	12650 02650 02654	04000 40000 00000	1.3v 8 0 0	800 - - -	3,4 " " "	Triode Diode #1 #2	Gm* Em* Em* Em*
6AW7	6.3v .3a	EGGG- BEED(26) FE3B(20) FE3B(20)	21000 20040 00402	45600 05600 05600	0v 8 0 0	750 - -	7,8 " " "	Triode Diode 1 2	Gm* Em* Em* Em*
6AW8	6.3v .6a	BGGG- BEED(16) BEED(13)	22256 21456 22256 21456	21340 22220 21340 22220	1v 1.5v 4 6	5600 2400 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em*
6AX4	6.3v 1.2a	AE3B(4)	00204	05600	-	-	7,8		Em*
6AX5	6.3v 1.2a	GE3E(5)	06004 06400	05200	- -	- -	2,7	Plate #1 #2	Em* Em*
6AX7	6.3v .3a	CGGG- BEED(34)	00256 41256 00256 41256	41200 00200 41200 00200	1.4v 6 6 6	800 800 - -	4,5,9 " " "	Triode 1 2 1 2	Gm* Gm* Em* Em*
6AX8	6.3v .45a	BGGG- BEED(26) BEED(8)	01356 40056 01356 40056	42000 00210 42000 00210	.75v 1v 6 19	2400 5400 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em*
6AZ5	6.3v .15a	FE3B(14)	02600 42600	52400 52000	- -	- -	3,6	Diode #1 #2	Em* Em*
6AZ6	6.3v .15a	FE3B(14)	00622 04622	54000 50000	- -	- -	3,6	Diode #1 #2	Em* Em*
6AZ8	6.3v .45a	CGGG- BGGG- BEED(8) BEED(20)	22265 43265 22265 43265	22410 12220 22410 12220	4.8v .8v 10 9	2000 2500 - -	4,5 " " "	Triode Pentode Triode Pentode	Gm* Gm* Em* Em*
634	6.3v 1a	DGGG- BEED(5)	06401	05000	25v 35	1925	2,7		Gm Em*
6B5	6.3v .8a	CGGG- BEED(12) BEED(8)	64312 62412 64312	50000 " "	1.6v 35 32	925 - -	1,6 " "	Input Output	Gm* Em* Em*
6B6	6.3v .3a	BGGG- BEED(33) FE3B(20)	06400 06004 06040	05210 05200	.8v 8 -	725 - -	2,7 " "	G Cap-Triode Diode #1 #2	Gm* Em* Em* Em*
6B7	6.3v .3a	EGGG- BEED(19) FE3B(20)	64300 60004 60040	25010 25000	5.5v 20 -	650 - -	1,7 " "	G Cap-Pentode Diode #1 #2	Gm* Em* Em* Em*
6B8	6.3v .3a	EGGG- BEED(18) FE3B(20)	26400 26040 26004	35210 25200	4v 20 -	725 - -	2,7 " "	G Cap-Pentode G Cap-Pentode Diode #1 #2	Gm* Em* Em* Em*
6BA5	6.3v .15a	CGGG-	10604	53200	2.9v	1360	3,6		Gm*
6BA6	6.3v .3a	BGGG- BEED(12)	12654	32000	1v 18	2000	3,4	may light on other pins	Gm* Em*
6BA7	6.3v .3a	BGAG- BGGG- BEED(16) BEED(6)	30265 41265 32265 41265	21040 02000 21040 22020	0v 7 24	1000 5000 - -	4,5 " " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6BA8	6.3v .6a	BGGG- CGGG- BEED(16) BEED(9)	00056 21456 00056 21456	21340 00000 21340 00000	1.5v 6.75v 5 15	4400 1750 - -	4,5 "n" "n" "n"	Pentode Triode Pentode Triode	Gm* Gm* Em Em
6BC4	6.3v .225a	BGGG- EEBB(8)	41056 "	20000 "	1.8v 6	6200 -	1,2,3,4,5,7,8,9 "		Gm* Em
6BC5	6.3v .3a	BGGG- BEED(26)	12654 "	32000 "	.5v 9	3200 -	2,3,4,7 "		Gm* Em
6BC7	6.3v .45a	FEED(12) "	20065 24065	02420 02020	0 "	- -	4,5 "	Diode #1 " #2 " #3	Em* Em* Em*
6BC8	6.3v .4a	BGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	2v " 10 10	4100 " - -	4,5 " " "	Triode #1 " #2 Triode #1 " #2	Gm* Gm* Em Em
6BD5	6.3v .9a	DGGG- BEED(9)	16204 "	05300 "	2.2v 11	3150 -	2,7 "		Gm Em*
6BD6	6.3v .3a	CGGG- BEED(16)	12654 "	32000 "	3v 16	1200 -	3,4 "		Gm* Em
6BE6	6.3v .3a	BGAG- BGGG- EEED(20) BEED(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 6 13	900 4500 - -	3,4 " " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em Em
6BE7	6.3v .2a	EGGG- "	40256 "	31020 "	5v "	650 -	3,4,5,8 "		Gm*
6BE8	6.3v .45a	BGGG- BEED(5) EEED(9)	00256 14256 00256 14256	43210 00000 43210 00000	.8v 1.1v 5 9	2400 4000 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em Em
6BF5	6.3v .2a	DGGG- BEED(5)	12654 "	30000 "	12v 9	2500 -	1,3,4,7 "		Gm* Em*
6BF6	6.3v .3a	EGGG- BEED(9) FEED(20)	12650 02650 00000	04000 40000 00000	3v 24 0	1200 - -	3,4 " "	Triode " Diode #1 Diode #2	Gm* Em Em* Em*
6BF7	6.3v .3a	CGGG- EEED(11)	00602 41620 00602 41620	51400 50000 51400 50000	1.7v " 7 "	2975 - - -	3,6 " " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
6BG6	6.3v .9a	BGGG- BEED(5)	06201 "	05304 "	4.4v 32	3825 -	2,7 "	P Cap P Cap	Gm* Em
6BG7	6.3v .3a	CGGG- EEED(11)	00602 41620 00602 41620	51400 50000 51400 50000	1.7v " 7 "	2975 - - -	3,6 " " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
6BH6	6.3v .15a	BGGG- BEED(15)	12654 "	32000 "	.8v 15	2100 -	3,4 "		Gm* Em
6BH8	6.3v .6a	BGGG- CGGG- BEED(15) BEED(9)	00056 21456 00066 21456	21340 00000 21340 00000	.8v 5.6v 6 10	4300 2000 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em Em
6BJ6	6.3v .15a	BGGG- BEED(15)	12654 "	32000 "	.8v 11	2400 -	3,4 "		Gm* Em
6BJ8	6.3v .6a	CGGG- BEED(11) FEED(14)	00056 " 00256 42056	04120 " 40000 00000	5.5v 10 -	1775 - -	4,5 " "	Triode 1 " Diode 1 2	Gm* Em Em* Em*
6BK5	6.3v 1.2a	BGGG- BEED(9)	40156 "	20300 "	0v 11	4700 -	3,4,5,7 "		Gm Em*
6BK6	6.3v .3a	BGGG- BEED(9) FEED(17)	12650 22650 22654 00000	04000 40000 00000	.8v 22 0	800 - -	3,4 " "	Triode " Diode #1 " #2	Gm* Em Em* Em*
6BK7	6.3v .45a	BGGG- EEED(10)	00256 41256 00256 41256	41200 00200 41200 00200	1.2v 8 "	5300 - -	4,5 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
6BL4	6.3v 3a	AEED(0)	00204 "	05600 "	- "	- -	7,8 "		Em*
6BL7	6.3v 1.5a	DGGG- BEED(6)	14200 00014 14200 00014	05600 25600 05600 25600	5.2v 17 "	3150 - -	7,8 " "	Triode 1 " 2 " 1 " 2	Gm* Gm* Em Em
6BN4	6.3v .2a	BGGG- FEED(9)	21654 "	00000 "	2.2v 8	4300 -	1,2,3,4,6,7 "		Gm* Em
6BN6	6.3v .3a	EGAG- CGAG- EEED(38)	21653 22653 21653	24000 14000 "	1.5v 2v 5	400 575 -	3,4 " "	Limiter Quadrature	Gm* Em Em
6BN7	6.3v .75a	BEED(5) BEED(18)	00265 41265	21040 20000	19 7	- -	4,5 "	Triode #1 " #2	Em* Em*
6BN8	6.3v .6a	CGGG- BEED(6) FEED(13)	00056 " 00256 42056	04120 " 40000 00000	2v 28 -	1600 - -	4,5 " "	Triode " Diode 1 2	Gm* Em Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6BQ5	6.3v .76a	DGGG- BEED(6)	01256	04030	9v 11	2900	1,2,4,5		Gm Em*
6BQ6	6.3v 1.2a	DGGG- BEED(6)	06031	05204	13.9v 10	2850	2,7	P. Cap	Gm Em*
6BQ7	6.3v .4a	BGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	2v 10	3100	4,5	Triode #1 #2 #1 #2	Gm Em Em Em
6BR8	6.3v .6a	BGGG- BEED(22) BEED(7)	22256 14256 22256 14256	43210 22220 43210 22220	1v 1v 9 18	2200 5000	4,5	Pentode Triode Pentode Triode	Gm Gm Em Em
6BS8	6.3v .4a	BGGG- EEBB(10)	00056 41256 00056 41256	41220 00020 41220 00020	2.5v 7 7	4500	4,5	Triode 1 2 1 2	Gm Gm Em Em
6BT8	6.3v .45a	BGGG- BEED(27) FEBB(15)	00056 00056 40256 04256	43120 43120 00000 00000	1v 5 - -	3800	4,5	Pentode Diode 1 Diode 2	Gm Em Em Em
6BU6	6.3v .3a	EGGG- BEED(9) FEBB(17)	12650 22650 22654	04000 40000 00000	6v 18 0	950	3,4	Triode Diode #1 #2	Gm Em Em Em
6BU7	6.3v .45a	FEBB(14)	22056 22056 24056	22420 42220 22220	- - -	-	4,5	Diode #1 #2 #3	Em Em Em
6BU8	6.3v .3a	BGAG- EEED(20)	23056 23456 23056 23456	01420 21000 01420 21000	0v 0v 10 10	600	4,5	Pentode Pentode Pentode Pentode	Gm Gm Em Em
6BV8	6.3v .6a	BGGG- BEED(9) FEBB(14)	21456 21456 00056	00000 00000 02040 40200	2v 13 - -	3500	4,5	Triode Diode 1 2	Gm Em Em Em
6BW4	6.3v .9a	AEBB(7)	20056 40056	04020 02020	- -	-	4,5	Diode 1 2	Em Em
6BW8	6.3 .45a	DGGG- BEED(20) FEBB(12)	00056 02456 42056	12340 00000 00000	.75v 5 -	2400	4,5	Pentode Diode 1 2	Gm Em Em Em
6BX6	6.3v .3a	BGGG-	21056	04320	.5v	4500	1,3,4,5		Gm
6BX7	6.3v 1.5a	AEBB(6)	00214 14200	26500	12	-	7,8	Triode 1 2	Em Em
6BX8	6.3v .4a	BGGG- BEED(7)	00056 41256 00056 41256	41220 00020 41220 00020	5v 12 12	3000	4,5	Triode 1 2 1 2	Gm Gm Em Em
6BY5	6.3v 1.6a	AEBB(4)	06004 26040	05200 05000	- -	-	2,7	Plate 1 2	Em Em
6BY6	6.3v .3a	BGAG- EEAC(8) BEED(35)	22564 12564 22564 12564	31000 32000 31000 32000	1v 1v 6 5	1000 500	3,4	Grid 3 1 3 1	Gm Gm Em Em
6BY8	6.3v .6a	BGGG- BEED(12) GEBB(7)	12056 12056 00256	04320 04320 40000	.8v 16 0	2500	4,5	Pentode pentode Diode	Gm Em Em
6BZ6	6.3v .3a	BGGG- BEED(23)	12654	32000	1v 6	3900	3,4		Gm Em
6BZ7	6.3v .4a	BGGG- EEBB(9)	00265 41265 00265 41265	41200 00200 41200 00200	2.7v 9 9	4000	4,5	Triode 1 2 1 2	Gm Gm Em Em
6BZ8	6.3v .4a	BGGG- BEED(8)	00056 41256 00056 41256	41220 00020 41220 00020	1.6v 9 9	5000	4,5	Triode 1 2 1 2	Gm Gm Em Em
6C4	6.3v .15a	EGGG- BEED(9)	40650	12000	4.8v 15	1300	1,3,4,5		Gm Em
6C5	6.3v .3a	EGGG- BEED(14)	06401	05200	4.1v 10	1275	2,7		Gm Em
6C6	6.3v .3a	EGGG- BEED(15)	64322	50010	3.2v 18	775	1,6		Gm Em
6C7	6.3v .3a	EGGG- BEED(12) FEBB(20)	64000 60040 60004	25010 25000	6.8v 15 -	790	1,7	G Cap-Triode " " Diode #1 #2	Gm Em Em Em
6C8	6.3v .3a	CGGG- BEED(9)	06001 06420 06001 06420	45200 05010 45200 05010	2v 22 -	1025	2,7	Triode #1 G Cap-Triode #2 Triode #1 G Cap-Triode #2	Gm Gm Em Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6CA4	6.3v 1a	EEBB(6)	40256 00256	00000 04000	- -	- -	4,5	Plate 2	Em*
6CA5	6.3v 1.2a	BGGG- BEED(7)	21561	34000	2v 8	4000	2,3,4,5		Em*
6CA7	6.3v 1.5a	BGGG- BEED(7)	26431	05200	1.5v 10	7000	2,7		Em*
6CB5	6.3v 2.5a	BGGG- BEED(6)	36210 36210	05004 05004	12v 5	5000	1,2,3,4,5,6,7,8	P. Cap	Em*
6CB6	6.3v .3a	BGGG- BEED(23)	12654	32000	1v 6	3900	3,4		Em*
6CD6	6.3v 2.5a	BGGG- BEED(5)	06201	05304	17v 0	4125	2,7	P. Cap	Em*
6CE5	6.3v .3a	BGGG- BEED(23)	12654	30000	1v 7	3900	2,3,4,7		Em*
6CF6	6.3v .3a	BGGG- BEED(20)	12654	32000	.8v 4	3500	3,4		Em*
6CG7	6.3v .6a	BGGG- CGGG- BEED(12) BEED(12)	00056 41256 00056 41256	41220 00020 41220 00020	3.7v 3.7v 10 10	1640 1640 - -	4,5 " " " "	Triode 1 2 1 2	Em*
6CG8	6.3v .45a	BGGG- CGGG- BEED(25) BEED(10)	00056 14256 00056 14256	43210 00000 43210 00000	1.2v 2v 15 11	2900 3650 - -	3,4,5,8 3,4,5,8 " " " "	Pentode Triode Pentode Triode	Em*
6CH7	6.3v .4a	BGGG- EEBB(10)	00056 41256 00056 41256	41200 00000 41200 00000	2.8v 6 6	4300 - -	4,5,8,9 " " " "	Triode 1 2 1 2	Em*
6CH8	6.3v .45a	BGGG- CGGG- BEED(14) EEBB(9)	04356 20056 04356 20056	21000 00140 21000 00140	.8v 4v 9 6	3900 2100 - -	4,5 4,5 " " " "	Pentode Triode Pentode Triode	Em*
6CJ6	6.3v 1.05a	BGGG-	01256	00304	16v	2900	4,5	P. Cap	Em*
6CK6	6.3v .71a	BGGG-	31256	24000	.5v	6300	4,5		Em*
6CL6	6.3v .65a	BGGG- BEED(10)	21365	42000	1v 8	6000	2,3,4,5,8,9		Em*
6CL8	6.3v .45a	BGGG- 3EBD(7) BEED(13)	00056 14256 14256 00056	43210 00000 00000 43210	1v 1v 24 15	2800 5000 - -	4,5 " " " "	Tetrode Triode Triode Tetrode	Em*
6CM6	6.3v .45a	BGGG- BEED(11)	30156	02040	3.3v 11	2600	3,4,5,6		Em*
6CM7	6.3v .6a	BGGG- CGGG- BEED(13) BEED(8)	00256 40056 00256 40056	41000 00120 41000 00120	5.6v 4.5v 10 13	1260 2800 - -	4,5 " " " "	Triode 1 2 1 2	Em*
6CM8	6.3v .45a	BGGG- CGGG- BEED(25) BEED(19)	01256 40056 40056 01256	43000 00210 00210 43000	1v 1.4v 9 7	3800 1260 - -	4,5 " " " "	Pentode Triode Pentode Triode	Em*
6CN7	6.3v .3a	BGGG- BEED(36) FEED(13)	00056 00056 04256	21400 21400 00000	1.3v 7 0	750 - -	4,5,9 " " " "	Triode Diode 1 2	Em*
6CQ8	6.3v .45a	BGGG- CGGG- BEED(13) BEED(8)	01356 40056 01356 40056	42000 00210 42000 00210	.7v 1.5v 16 18	2900 5000 - -	4,5 " " " "	Tetrode Triode Tetrode Triode	Em*
6CR6	6.3v .3a	BGGG- BEED(16) FEED(18)	22654 24650	31000 00000	2.8v 14 -	1225 - -	3,4 " " " "	Pentode Pentode Diode	Em*
6CS6	6.3v .3a	BGAG- EEAC(15) EEAC(18)	22564 12564 22564 12564	31000 32000 31000 32000	1v 1v 6 4	1000 500 - -	3,4 " " " "	Grid 3 1 3 1	Em*
6CS7	6.3v .6a	BGGG- CGGG- BEED(8) BEED(11)	00056 40156 00056 40156	41200 00020 41200 00020	4.5v 6v 15 14	1400 2840 - -	4,5 4,5 " " " "	Triode 1 2 1 2	Em*
6CU5	6.3v 1.2a	BGAG- BEED(6)	21650 21650	34000 34000	1.5v 7	4700	2,3,4,5		Em*
6CU6	6.3v 1.2a	BGGG- BEED(6)	06031	05204	13.9v 10	2850	2,7	P. Cap	Em*
6CX8	6.3v	BGGG- CGGG- BEED(9) BEED(9)	00056 21456 00056 21456	21340 00000 21340 00000	2.2v 2v 11 18	4100 2900 - -	4,5 " " " "	Pentode Triode Pentode Triode	Em*
6CY5	6.3v .2a	BGAG- AEED(15)	12654	30000	1v 8	3800	2,3,4,7		Em*
6CY7	6.3v .75a	BGGG- BEED(34) BEED(5)	00056 40156 00056 40156	41200 00020 41200 00020	1.7v 20v 6 34	300 2550 - -	2,3,4,5 " " " "	Triode 1 2 1 2	Em*
6CZ5	6.3v	BGGG- BEED(7)	30156	02040	3.8v 15	3000	3,4,5,6		Em*
6D4	6.3v .25a	GEED(5)	20652	04000	0	-	3,4	Thyratron	Em*
6D5	6.3v	BGGG- BEED(6)	06401	05200	19v 32	1300	2,7		Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6D6	6.3v .3a	EGGG- BEED(15)	64322	50010	3.2v 17	1025	1,6	G Cap	Gm*
6D7	6.3v .3a	EGGG- BEED(15)	64320	25010	3.9v 18	775	1,7	G Cap	Gm*
6D8	6.3v .15a	EGAG- EED(15) BEED(28)	06432 06231 06432 06221	05210 45200 05210 45200	0v 35 21	825 250	2,7	G Cap - Amp. Osc. " " Amp. Osc.	Gm* Gm* Gm* Em*
6DA4	6.3v 1.2a	BEED(5)	00254	05600	-	-	7,8		Em*
6DB5	6.3v 1.2a	EGAG BEED(8)	31256	00040	1.5v 7	5675	2,3,4,5,6,7		Gm* Em
6DB6	6.3v .3a	CGGG- CGAG-	12654 22654	32000 31000	2v 3.6v	1300 630	3,4	Grid 1 3	Gm* Gm*
6DC6	6.3v .3a	BGGG- BEED(20)	12564	32000	1v 6	2800	3,4		Gm* Em*
6DE6	6.3v .3a	BGGG- BEED(23)	12654	32000	1v 6	3900	3,4		Gm* Em*
6DE7	6.3v .9a	EGGG- BGGG- BEED(11) AE8B(5)	00056 41056 00056 41056	41200 00020 41200 00020	7v 12v 12 11	1260 4100	4,5	Triode 1 Triode #2 " 1 " 2	Gm* Gm* Gm* Em*
6DG6	6.3v 1.2a	EGAG- BEED(6)	06431 06431	05200 05200	1.8v 7	5000	2,7		Gm* Em*
6DK6	6.3v .3a	BGGG- BEED(22)	12654	32000	1v 5	4400	3,4		Gm* Em*
6DM6	6.3v 2.5a	EGAG- BEED(6)	06201 06201	05304 05304	7.5v 0	5650	2,7	P. Cap	Gm* Em*
6DQ6	6.3v 1.2a	BGGG- BEED(5)	06031	05204	12v 6	3800	2,7	P. Cap	Gm* Em*
6DS5	6.3v .8a	BGGG- BEED(13)	12654	30000	2.5v 5	3800	1,3,4,7		Gm* Em*
6DT6	6.3v .3a	EGGG- EGAG- BEED(22)	12654 22654 12654	32000 31000	3.5v 2v 11	350 300	3,4	Grid 1 2	Gm* Em*
6E5	6.3v .3a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	Gm* Em*
6E6	6.3v .6a	EGGG- BEED(8)	60021 64120 60021 64120	45000 05000 45000 05000	13.4v 21	890	1,7	Triode #1 " #2 " #1 " #2	Gm* Em* Em* Em*
6E7	6.3v .3a	EGGG- BEED(14)	64320	25010	3.9v 19	975	1,7	G Cap	Gm* Em*
6EA8	6.3v .45a	BGGG- BGGG- BEED(17) BEED(7)	01356 40056 01356 40056	42200 02210 42200 02210	1v 1v 6 18	2200 5000	4,5	Pentode Triode Pentode Triode	Gm* Em* Em* Em*
6F4	6.3v .225a	BGGG- BEED(6)	64452	01100	4.9v 28	5650	1,2,3,4,7,8		Gm* Em*
6F5	6.3v .3a	CGGG- BEED(28)	26040	05210	1.6v 8	925	2,7	G Cap	Gm* Em*
6F6	6.3v .7a	CGGG- BEED(9)	26431	05200	1.7v 24	1650	2,7		Gm* Em*
6F7	6.3v .3a	EGGG- BEED(20) BEED(12)	64302 60341 64302 60041	25010 25000 25010 25000	4.9v 18 36	725 325	1,7	G Cap-Pentode Triode " " Pentode Triode	Gm* Em* Em* Em*
6F8	6.3v .6a	EGGG- BEED(13)	06001 06420 06001 06420	45200 05010 45200 05010	4.7v 10	1275	2,7	Triode #1 G Cap-Triode #2 Triode #1 G Cap-Triode #2	Gm* Em* Em* Em*
6G5/6U5	6.3v .3a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	Gm* Em*
6G6	6.3v .15a	CGGG- BEED(9)	06431	05200	5.5v 24	1420	2,7		Gm* Em*
6H4	6.3v .15a	FEED(14)	06040	05200	-	-	2,7		Em*
6H5	6.3v .3a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	Gm* Em*
6H6	6.3v .3a	FEED(14)	06004 06420	05200 05000	0	-	2,7	Diode #1 " #2	Em* Em*
6J4	6.3v .4a	AGGG- BEED(6)	12651	14000	2v 25	7000	1,3,4,5,6		Gm* Em*
6J5	6.3v .3a	DGGG- BEED(12)	26401	05200	3.8v 10	1650	2,7		Gm* Em*
6J6	6.3v .45a	BGGG- BEED(11)	04651 40650 04651 40650	02000 12000 02000 12000	2.5v 10	3300	3,4	Triode #1 " #2 " #1 " #2	Gm* Em* Em* Em*
6J7	6.3v .3a	EGGG- BEED(15)	06432	05210	4v 18	775	2,7	G Cap	Gm* Em*
6J8	6.3v .3a	CGGG- BGGG- EED(18) BEED(14)	06431 06231 06432 06221	25210 45200 25210 45200	2.4v 0v 6 12	650 1000	2,7	G Cap-Heptode Triode " " Heptode Triode	Gm* Em* Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6K4	6.3v .15a	BGGG-	41652	00000	4v	3500	3,4		Gm*
6K5	6.3v .3a	CGGG- BEED(24)	06400	05210	2v 8	875	2,7	G Cap	Gm* Em
6K6	6.3v .4a	EGGG- BEED(9)	06431	05200	7.2v 22	1025	2,7		Gm* Em*
6K7	6.3v .3a	EGGG- BEED(26)	06432	05210	2.8v 10	925	2,7	G Cap	Gm* Em*
6K8	6.3v .3a	BGGG- EEED(26) BEED(14)	06431 06231 06432 06221	25210 45200 25210 45200	1.1v 10 18	625 1525	2,7	G Cap - Hexode Triode Hexode Triode	Gm* Em* Em* Em*
6L4	6.3v .225a	BGGG-	64452	01100	4.9v	4025	1,2,3,4,7,8		Gm*
6L5	6.3v .15a	EGGG- BEED(12)	06401	05200	5.9v 10	950	2,7		Gm* Em
6L6	6.3v .9a	BGGG- BEED(8)	26431	05200	2.9v 14	3825	2,7		Gm* Em*
6L7	6.3v .3a	EGGG- FEED(17) EEED(22)	06432 26431 06422 26431	05210 05200 05210 05200	5v 1.1v 8 7	400	2,7	G Cap - Osc. Amp. Osc. Amp.	Gm* Em* Em* Em*
6M3	6.3v 3a	EEED(6)	06200	00504	0	-	1,2,3,5,7,8	P. Cap Reverse Meter	Em*
6N4	6.3v .2a	BGGG- BEED(7)	12654	21000	1.6v 15	4000	1,2,3,4,6,7		Gm* Em
6N5/6AB5	6.3v .15a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	* *
6N6	6.3v .8a	EGGG- BEED(8) BEED(12)	06431 06241	05200	0v 32 35	950	2,7	Output Input	Gm* Em*
6N7	6.3v .8a	CGGG- CGGG- BEED(7)	06201 06410 06201 06410	45200 25200 45200 25200	2.9v 29	975	2,7	Triode #1 #2 #1 #2	Gm* Em* Em* Em*
6P5	6.3v .3a	EGGG- BEED(13)	06401	05200	6.1v 10	925	2,7		Gm* Em
6P7	6.3v .3a	EGGG- BEED(20) BEED(12)	05643 05620 05643 05620	20210 41200 20210 41200	4.9v 18 36	700 325	2,3	G Cap-Pentode Triode pentode Triode	Gm* Em* Em* Em*
6Q4	6.3v .48a	AGGG- BEED(5)	10256	00040	1v 28	6000	1,2,4,5,7,8		Gm* Em
6Q5	6.3v .6a	BEED(5)	06401	05200	0	-	2,7	Thyratron	Em*
6Q7	6.3v .3a	EGGG- BEED(28) FEED(20)	26400 26040 26004	05210 05200	2.4v 9 -	495	2,7	G Cap - Triode Diode #1 Diode #2	Gm* Em* Em* Em*
6R4	6.3v .2a	DGGG-	10256	00400	6v	2200	4,5		Gm*
6R6	6.3v .3a	BEED(27)	06304	05210	10	-	2,7		Em*
6R7	6.3v .3a	EGGG- FEED(12) FEED(20)	26400 26040 26004	05210 05200	4.1v 8 -	1200	2,7	G Cap - Triode Diode #1 Diode #2	Gm* Em* Em* Em*
6R8	6.3v .45a	EGGG- BEED(11) FEED(12)	00256 04256 40256 00256	02140 02000	5v 14 0 -	1000	4,5	Triode Diode #1 Diode #2 Diode #3	Gm* Em* Em* Em* Em*
6S4	6.3v .6a	DGGG- BEED(7)	02056	10040	4v 18	2600	4,5	1,3,6,7,8 may short.	Gm* Em
6S7	6.3v .15a	EGGG- BEED(15)	06432	05210	4.9v 15	1075	2,7	G Cap	Gm* Em
6S8	6.3v .3a	EGGG- BEED(33) FEED(20)	02000 02402 02042 42002	45610 05600	.8v 8 -	575	7,8	G Cap - Triode Diode #1 Diode #2 Diode #3	Gm* Em* Em* Em* Em*
6SA7	6.3v .3a	BGAG- BGGG- FEED(21) BEED(8)	06432 06041 06432 06041	25100 25200 25100 25200	0v 8 14	775 2850	2,7	Amp. Osc. Amp. Osc.	Gm* Em* Em* Em*
6SB7	6.3v .3a	BGAG- BGGG- FEED(15) BEED(6)	06432 06041 06432 06041	25100 25200 25100 25200	0v 7 30	1075 5000	2,7	Amp. Osc. Amp. Osc.	Gm* Em* Em* Em*
6SC7	6.3v .3a	BGGG- BEED(20)	02014 04102 02014 04102	25600	.8v 14	850	7,8	Triode #1 #2 #1 #2	Gm* Em* Em* Em*
6SD7	6.3v .3a	CGGG- BEED(20)	06212	35400	2.5v 8	1925	2,7		Gm* Em
6SF5	6.3v .3a	BGGG- BEED(26)	22104	05600	.8v 8	975	7,8		Gm* Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6SF7	6.3v .3a	BGGG- BEED(14) FEED(20)	21230	45600	.8v 18	1275	7.8	Pentode	Gm*
6SG7	6.3v .3a	BGGG- BEED(22)	26012	35400	.8v 7	2525	2,3,5.7	Diode	Gm*
6SH7	6.3v .3a	BGGG- BEED(20)	26012	35400	.6v 9	2525	2,3,5.7		Gm*
6SJ7	6.3v .3a	CGGG- BEED(14)	06212	35400	3.2v 17	1050	2,7		Gm*
6SK7	6.3v .3a	CGGG- BEED(15)	06212	35400	1.7v 15	1250	2,7		Gm*
6SL7	6.3v .3a	BGGG- "BEED(24)	02014 14202 02014 14202	25600 05600 25600 05600	.4v "10	1025	7.8	Triode #1 " #2 " #1 " #2	Gm*
6SN7	6.3v .6a	CGGG- "BEED(9)	02014 14202 02014 14202	25600 05600 25600 05600	3.6v 16	1650	7.8	Triode #1 " #2 " #1 " #2	Gm*
6SQ7	6.3v .3a	BGGG- BEED(30) FEED(20)	21200 20204 20240	45600 05600	1v 9	725	7.8	Triode Diode #1 " #2	Gm*
6SR7	6.3v .3a	CGGG- BEED(12) FEED(20)	21200 20204 20240	45600 05600	4.4v 11	1225	7.8	Triode Diode #1 " #2	Gm*
6SS7	6.3v .15a	EGGG- BEED(24)	06212	35400	3.2v 9	1175	2,7		Gm*
6ST7	6.3v .15a	EGGG- BEED(12) FEED(20)	21200 20204 20240	45600 05600	3.4v 13	1225	7.8	Triode Diode #1 " #2	Gm*
6SU7	6.3v .3a	BGGG- "BEED(24)	02014 14202 02014 14202	25600 05600 25600 05600	1v 9	1000	7.8	Triode #1 " #2 " #1 " #2	Gm*
6SV7	6.3v .3a	BGGG- BEED(22) FEED(14)	01230 00234	45600 05600	1v 8	1650	7.8	Pentode Diode	Gm*
6SZ7	6.3v .15a	CGGG- BEED(11) AEED(20)	21200 00204 00240	45600 25600	1.4v 9	775	7.8	Triode Diode #1 " #2	Gm*
6T4	6.3v .225	BGGG- AEED(10)	41562	00000	7.5v 10	3100	1,2,3,4,6,7		Gm*
6T5	6.3v .3a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	"
6T7	6.3v .15a	EGGG- BEED(22) AEED(20)	06400 06204 06240	05210 05200	2.4v 12	625	2,7	G Cap - Triode Diode #1 " #2	Gm*
6T8	6.3v .45a	EGGG- BEED(34) FEED(12)	00256 "04256 40256	02140 42000 02000	1.3v 70	700	4,5	Triode Diode #1 " #2 " #3	Gm*
6U4	6.3v 1.2a	BEED(5)	00204	05600	-	-	7,8		Gm*
6U5	6.3v .3a	EGGG-	64132 60132	50000	1.3v	-	1,6	Eye Closed Eye Open	"
6U6	6.3v .75a	BGGG- BEED(7)	06431	05200	8.9v 9	3900	2,7		Gm*
6U7	6.3v .3a	CGGG- BEED(20)	06432	05210	3.2v 17	1000	2,7	G Cap	Gm*
6U8	6.3v .45a	BGGG- BEED(22) BEED(7) FEED(5)	01356 40056 01356 40056	42200 02210 42200 02210	1v 9 18	2200 5000	4,5	Pentode Triode Pentode Triode	Gm*
6V3	6.3v 1.75a	AEED(5)	04065	00002	0	-	2,4,5,7,9	P Cap	Gm*
6V4	6.3v .6a	AEED(5)	20256 40256	04000 00000	-	-	4,5	Diode 1 " 2	Gm*
6V5	6.3v .45a	DGGG-	00431	05600	10v	2625	7,8		Gm*
6V6	6.3v .45a	DGGG- BEED(8)	26431	05200	3.2v 22	2625	2,7		Gm*
6V7	6.3v .3a	EGGG- BEED(10) FEED(19)	06400 06040 06004	05210 05200	11.7v 15	625	2,7	Triode Diode #1 " #2	Gm*
6V8	6.3v .45a	CGGG- FEED(37) FEED(18) FEED(12)	40256 00256 04200 04256	10200 00240 04200 00200	2v 40	780	4,5	Triode Diode #1 " #2 " #3	Gm*
6W4	6.3v 1.2a	BEED(5)	00204	05600	-	-	7,8		Gm*
6W5	6.3v .9a	AEED(3)	06400 06004	05200	-	-	2,7	Plate #1 " #2	Gm*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6W6	6.3v 1.2a	BGAG- BEED(6)	06431	05200	1.49v 7	5650	2.7		Gm Em*
6W7	6.3v .15a	CGGG- BEED(21)	06432	05210	4.1v 11	775	2.7	G Cap	Gm*
6X4	6.3v .6a	AEED(4)	40650 00650	02000 42000	0	-	3.4	Plate #1	Em*
6X5	6.3v .6a	AEED(4)	06400 06004	05200	-	-	2.7	Plate #1	Em*
6X8	6.3v .45a	BGGG- BEED(23) BEED(11)	20056 21456 20056 21456	21340 20000 21340 20000	1v 2v 6 8	3000 3500	4.5	Pentode Triode pentode Triode	Gm Gm*
6Y5	6.3v .8a	AEED(4)	60024 60420	50000	0	-	1.6	Plate #1	Em*
6Y6	6.3v 1.25a	DGGG- BEED(6)	06431	05200	11.7v 9	3150	2.7		Gm Em*
6Y7	6.3v .6a	CGGG- BEED(8) BEED(8)	06201 06410 06201 06410	45200 25200 45200 25200	1.6v 25	625	2.7	Triode #1	Gm
6Z3	6.3v .3a	AEED(4)	64250	00000	0	-	1.4		Em*
6Z4	6.3v .5a	AEED(5)	60425 64025	00000	0	-	1.5	Plate #1	Em*
6Z5	6.3v .8a	AEED(2)	65420 65024	50000	-	-	1.2, 6	Plate #1	Em*
6Z7	6.3v .3a	EGGG- BEED(9)	06001 06410 06001 06410	45200 05200 45200 05200	.8v 25	975	2.7	Triode #1	Gm
6ZX5	6.3v .3a	AEED(5)	06400 06004	05200	-	-	2.7	Plate #1	Em*
6ZY5	6.3v .3a	AEED(5)	06004 06400	05200	0 0	-	2.7	Plate 1	Em*
7A4	6.3v .3a	DGGG- BEED(9)	64000	12500	3.6v 17	1650	1.8		Gm*
7A5	6.3v .75a	BGGG- BEED(8)	64300	12500	8.6v 8	3825	1.8		Gm*
7A6	6.3v .15a	FEED(15)	62400 62200	22500 42500	-	-	1.8	Diode #1	Em*
7A7	6.3v .3a	CGGG- BEED(15)	64320	12500	2.9v 15	1275	1.8		Gm*

STOP

STOP

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
7A8	6.3v .15a	EGAG- "EEBD(15) BEED(46)	64023 60413 64223 62412	12500 22500 12500 22500	1.6v 2.9v 35 15	625 325 - -	1,8 " " " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em Em
7AB7	6.3v .15a	CGGG- "BGGG- BEED(16)	36421 "64320 "60001	05000 12500 42500	2.1v .6v 6	1150 5325 -	1,4,6,7,8 1,8 "		Gm* Em Em
7AD7	6.3v .6a	BGGG- "BGGG- BEED(12)	64320 "60001 "62410	12500 42500 00500	4.3v 10	1625 -	1,8 " "	Triode #1 " #2 " #1 " #2	Gm* Em Em Em
7AF7	6.3v .3a	BGGG- "BGGG- BEED(19)	64320 "60001 "62410	12500 42500 00500	.9v 11	1900 -	1,8 "		Gm* Em Em
7AG7	6.3v .15a	BGGG- "BGGG- BEED(18)	64320 "60001 "62410	12500 42500 00500	.9v 12	2125 -	1,8 "		Gm* Em Em
7AH7	6.3v .15a	BGGG- "BGGG- BEED(24)	64320 "60001 "62410	12500 42500 00500	1.4v 8	1450 -	1,8 "		Gm* Em Em
7AJ7	6.3v .3a	BGGG- "BGGG- BEED(15)	64320 "60001 "62410	12500 42500 00500	.1v 10	2450 -	1,8 "		Gm* Em Em
7AK7	6.3v .8a	BGGG- "BGGG- BEED(9)	64320 "60001 "62410	12500 42500 00500	3v 16	2000 -	4,5,9 "	Triode #1 " #2 " #1 " #2	Gm* Em Em Em
7AU7	7.5v .31a	CGGG- "BGGG- BEED(28)	00256 41256 00200 41256	41200 00200 41200 "	.9v 8	975 -	1,8 "		Gm* Em Em
7B4	6.3v .3a	EGGG- "EGGG- BEED(9)	64300 "64300 "64300	12500 12500 02500	7.2v 22	1050 -	1,8 "		Gm* Em Em
7B5	6.3v .4a	BGGG- "BGGG- BEED(30)	64100 "62204 "62200	02500 42500 "	1.2v 9	725 -	1,4,7,8 "	Triode Diode #1 " #2	Gm* Em Em Em
7B6	6.3v .3a	BGGG- "BGGG- BEED(15)	64320 "60001 "62410	12500 42500 22500	4.7v 17	1075 -	1,8 "		Gm* Em Em
7B7	6.3v .15a	EGGG- "EGGG- BEED(18)	64023 60413 64223 62412	12500 22500 12500 22500	0v 20	825 730 -	1,8 " "	Amp. Osc. Amp. Osc.	Gm* Em Em Em
7B8	6.3v .3a	EGAG- "EEBD(18) BEED(24)	64023 60413 64223 62412	12500 22500 12500 22500	20	-	"		Gm* Em Em
7C4	6.3v .15a	FEBB(16)	60040	02500	-	-	1,8		Em*
7C5	6.3v .45a	BGGG- "BGGG- BEED(8)	64300 "64100 "62204	12500 02500 02500	4.9v 22 18	2625 575 -	1,8 1,4,7,8 "		Gm* Em Em
7C6	6.3v .15a	BGGG- "BGGG- BEED(28)	64100 "62204 "62200	02500 42500 "	.4v 18	575 -	1,4,7,8 "	Triode Diode #1 " #2	Gm* Em Em Em
7C7	6.3v .15a	BGGG- "BGGG- BEED(16)	64320 "60001 "62410	12500 42500 22500	2.3v 15	825 -	1,8 "		Gm* Em Em
7E5	6.3v .15a	CGGG- "BGGG- BEED(7)	16420 "64320 "60001	00500 12500 42500	2.7v 29	1925 -		Must show short in Position 1 thru 8. Must show short in Position 1 thru 8.	Gm* Em
7E6	6.3v .3a	CGGG- "BGGG- BEED(12)	64100 "62204 "62200	02500 02500 42500	3.9v 11	1225 -	1,4,7,8 "	Triode Diode #1 " #2	Gm* Em Em Em
7E7	6.3v .3a	CGGG- "BGGG- BEED(19)	64003 "62402 "62042	12500 22500 "	3.5v 15	825 -	1,8 "	Pentode Diode #1 " #2	Gm* Em Em Em
7F7	6.3v .3a	EGGG- "BGGG- BEED(24)	50201 62410 60201 62410	42500 20500 42500 20500	.9v 10	825 -	1,8 "	Triode #1 " #2 " #1 " #2	Gm* Em Em Em
7F8	6.3v .3a	BGGG- "BGGG- BEED(11)	06002 16420 06002 16420	45100 05000 45100 05000	1.1v 9	3140 -	2,7 "	Triode #1 " #2 " #1 " #2	Gm* Em Em Em
7G7	6.3v .45a	BGGG- "BGGG- BEED(17)	64320 "60001 "62410	12500 42500 00500	1.1v 8	2850 -	1,8 "		Gm* Em Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
7G8	6.3v .3a	EGGG-	62301	24500	.4v	1325	1,8	Tetrode #1	Gm*
		"	64310	22500	"	"	"	" #2	Gm*
		BEED(11)	62301	24500	17	"	"	" #1	Em
		"	64310	22500	"	"	"	" #2	Em
7H7	6.3v .3a	BGGG- BEED(16)	64320	12500	1.4v 11	2425	1,8		Gm*
7J7	6.3v .3a	CGGG-	64023	12500	1.5v	450	1,8	Heptode	Gm*
		"	60413	22500	3.4v	625	"	Triode	Gm*
		BEED(29)	64023	12500	13	"	"	Heptode	Em
		BEED(14)	60413	22500	12	"	"	Triode	Em
7K7	6.3v .3a	BGGG-	62410	00500	.9v	1000	1,8	Triode	Gm*
		BEED(24)	"	"	10	"	"	"	Em
		FEBB(20)	60004	02500	"	"	"	Diode #1	Em
		"	60000	42500	"	"	"	Diode #2	Em
7L7	6.3v .3a	BGGG- BEED(24)	64320	12500	.6v 8	1950	1,8		Gm*
7N7	6.3v .6a	CGGG-	60201	42500	4.1v	1650	1,8	Triode #1	Gm*
		"	62410	20500	"	"	"	" #2	Gm*
		BEED(9)	60201	42500	17	"	"	" #1	Em
		"	62410	20500	"	"	"	" #2	Em
7Q7	6.3v .3a	CGAG-	64320	12500	0v	625	1,8	Amp.	Gm*
		BGGG-	60410	22500	"	3450	"	Osc.	Gm*
		EEED(23)	64322	12500	6	"	"	Amp.	Em
		BEED(8)	60412	22500	13	"	"	Osc.	Em
7R7	6.3v .3a	CGGG-	64003	12500	1.6v	1875	1,8	Pentode	Gm*
		BEED(19)	"	"	11	"	"	"	Em
		FEBB(19)	62422	22500	"	"	"	Diode #1	Em
		"	62242	"	"	"	"	Diode #2	Em
7S7	6.3v .3a	CGGG-	64023	12500	2.9v	975	1,8	Heptode	Gm*
		"	60413	22500	2v	"	"	Triode	Gm*
		BEED(29)	64023	12500	9	"	"	Heptode	Em
		BEED(11)	60412	22500	18	"	"	Triode	Em
7T7	6.3v .3a	CGGG- BEED(20)	64320	12500	2v 9	1925	1,8		Gm*
7V7	6.3v .45a	BGGG-	64320	12500	.2v	2875	1,8		Gm*
		BEED(18)	"	"	8	"	"		Em
7W7	6.3v .45a	BGGG-	64322	12500	.2v	2875	1,4,7,8		Gm*
		BEED(18)	"	"	8	"	"		Em
7X6	6.3v 1.2a	BEED(6)	62400	02500	"	"	1,8	Plate #1	Em
		"	62000	42500	"	"	"	Plate #2	Em
7X7	6.3v .3a	BGGG-	64120	00500	1v	650	1,8	Triode	Gm*
		BEED(44)	"	"	9	"	"	"	Em
		FEBB(19)	60024	02500	"	"	"	Diode #1	Em
		"	60020	42500	"	"	"	Diode #2	Em
7Y4	6.3v .5a	AEBB(5)	60400	02500	"	"	1,8	Plate #1	Em
7Z4	6.3v .9a	"	60000	42500	"	"	"	Plate #2	Em
		AEBB(7)	60400	02500	"	"	1,8	"	Em
8AU8	7.5v .45a	BGGG-	21456	00000	1v	2000	4,5	Triode	Gm*
		"	00056	21340	"	3000	"	Pentode	Gm*
		BEED(20)	21456	00000	5	"	"	Triode	Em
		"	00056	21340	"	"	"	Pentode	Em
8AW8A	7.5v .4a	BGGG-	22256	21340	1v	5600	4,5	Pentode	Gm*
		"	21456	22220	1.5v	2400	"	Triode	Gm*
		BEED(16)	22256	21340	4	"	"	Pentode	Em
		BEED(13)	21456	22220	6	"	"	Triode	Em
8BA8A	7.5v .4a	BGGG-	00056	21340	1.5v	4400	4,5	Pentode	Gm*
		CGGG-	21456	00000	6-75v	1750	"	Triode	Gm*
		BEED(16)	00056	21340	5	"	"	Pentode	Em
		BEED(9)	21456	00000	15	"	"	Triode	Em
8BH8	7.5v .4a	BGGG-	00056	21340	.8v	4300	4,5	Pentode	Gm*
		CGGG-	21456	00000	5.6v	2000	"	Triode	Gm*
		BEED(15)	00056	21340	6	"	"	Pentode	Em
		BEED(9)	21456	00000	10v	"	"	Triode	Em
8BN8	7.5v .4a	CGGG-	00056	04120	2v	1600	4,5	Triode	Gm*
		BEED(6)	"	"	28	"	"	"	Em
		FEBB(13)	00256	40000	"	"	"	Diode 1	Em
		"	42056	00000	"	"	"	Diode 2	Em
8CG7	7.5v .4a	CGGG-	00056	41220	3.7v	1640	4,5	Triode 1	Gm*
		CGGG-	41256	00020	3.7v	1640	"	Triode 2	Gm*
		BEED(12)	00056	41220	10	"	"	" 1	Em
		"	41256	00020	10	"	"	" 2	Em
8CH7	7.5v .4a	CGGG-	00256	41000	5.6v	1260	4,5	Triode 1	Gm*
		BGGG-	40056	00120	4.5v	2800	"	" 2	Gm*
		BEED(13)	00256	41000	10	"	"	" 1	Em
		BEED(8)	40056	00120	13	"	"	" 2	Em
8CN7	7.5v .2a	EGGG-	00056	21400	1.3v	750	4,5,9	Triode	Gm*
		BEED(36)	00056	21400	7	"	"	"	Em
		FEBB(13)	04256	00000	0	"	"	Diode 1	Em
		FEBB(13)	40256	00000	0	"	"	Diode 2	Em
8CS7	7.5v .4a	CGGG-	00056	41200	4.5v	1400	4,5	Triode 1	Gm*
		BGGG-	40156	00020	6v	2840	"	" 2	Gm*
		BEED(8)	00056	41200	15	"	"	" 1	Em
		BEED(11)	40156	00020	14	"	"	" 2	Em
8CY7	7.5v .6a	CGGG-	00056	41200	1.7v	800	2,3,4,5	Triode 1	Gm*
		"	40156	00020	20v	2550	"	" 2	Gm*
		BEED(34)	00056	41200	6	"	"	" 1	Em
		BEED(5)	40156	00020	34	"	"	" 2	Em
8SN7	7.5v .4a	CGGG-	02014	25600	3.6v	1650	7,8	Triode 1	Gm*
		"	14202	05600	"	"	"	Triode 2	Gm*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
9AU7	10v .23a	CGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	3v 16 16	2000 - -	4,5,9 " "	Triode " "	1 2 1 2 Gm* Em*
9CL8	10v .23a	BGGG- BEED(7) BEED(13)	00056 14256 00056 43210	43210 00000 00000 43210	1v 1v 24 15	2800 5000 - -	4,5 " " "	Tetrode Triode Triode Tetrode	Gm* Gm* Em* Em* Gm*
9U8A	10v .9a	BGGG- BEED(22) BEED(7)	01356 40056 01356 40056	42200 02210 42200 02210	1v 9 18	2200 5000 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em* Gm*
9X8	10v .3a	BGGG- BEED(23) BEED(11)	20056 21456 20056 21456	21340 20000 21340 20000	1v 2v 6 8	3000 3500 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em* Gm*
10	7.5v 1.25a	EGGG- BEED(9)	64150 00000	00000	12v 24	750 -	1,4 "		Gm* Em*
10C8	10v .3a	BGGG- CGGG- BEED(16) BEED(7)	00056 41256 00056 41256	43120 00000 43120 00000	1.6v 1.4v 13 37	3150 2400 - -	4,5 " " "	Pentode Triode Pentode Triode	Gm* Gm* Em* Em*
10DE7	10v .6a	EGGG- BGGG- BEED(11) AEED(5)	00056 41056 00056 41056	41200 00020 41200 00020	7v 12v 12 11	1260 4100 - -	2,3,4,5 " " "	Triode " "	1 2 1 2 Gm* Em*
11C5	10v .15a	CGGG- BEED(7)	21561 00056	34000 41200	11v 9	2800 -	2,3,4,5 "		Gm* Em*
11CY7	10v .4a	CGGG- BEED(34) BEED(5)	00056 40156 00056 40156	41200 00020 41200 00020	1.7v 20v 6 34	800 2550 - -	2,3,4,5 " " "	Triode " "	1 2 1 2 Gm* Em*
12A	5v .25a	EGGG- BEED(9)	64150 00000	00000	15v 14	1000 -	1,4 "		Gm* Em*
12A4	12.6v .3a	BGGG- BEED(6)	21056 00040	00040	4.5v 15	5000 -	2,3,4,5,7 "		Gm* Em*
12A5	12.6v .3a	CGGG- BEED(8)	64312 05000	05000	17.8v 18	1150 -	1,6,7 "		Gm* Em*
12A6	12.6v .15a	CGGG- BEED(10)	26431 05200	05200	5.9v 22	1925 -	2,7 "		Gm* Em*
12A7	12.6v .3a	EGGG- BEED(10) AEED(4)	64302 60024 05000	25010 05000	12.1v 27 -	625 - -	1,7 " "	G Cap-Pentode " Diode	Gm* Em* Em* Gm* Em*
12A8	12.6v .15a	BGAG- EGAG- EED(13) BEED(21)	06432 06231 06432 06221	05210 45200 05210 45200	1v 2.9v 20 25	1000 325 - -	2,7 " " "	G Cap - Amp. " " Osc. " " Amp. " " Osc.	Gm* Gm* Em* Em*
12AB5	12.3v .2a	DGGG- BEED(8)	30156 12564	12340 32000	2v 24 15	2600 - -	1,3,4,5,6,8 3,4		Gm* Em*
12AC6	12.6v .15a	AEED(18)	12564	32000	15	-	3,4		Em*
12AD6	12.6v .15a	BGAG- BGGG- EED(9) BEED(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 6 13	900 4500 - -	3,4 " " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
12AD7	12.6v .225a	BGGG- BEED(34)	00056 41256 00056 41256	41200 00000 41200 00000	1.3v 1.3v 6 6	875 - - -	4,5,9 " " "	Triode " "	1 2 1 2 Gm* Em*
12AE6	12.6v .15a	BEED(16) FEED(23)	12650 02650 02654	04000 40000 00000	12 0 0	- - -	3,4 " "	Triode Diode	1 2 Em* Em*
12AE7	12.6v	EEED(7)	00056 42256 00000	41200 00000	8 5	- -	4,5,9 "	Triode	1 Em*
12AF6	12.6v .15a	CGAG- EEED(11)	12654 12654	32000 32000	5v 4	725 -	3,4 3,4		Gm* Em*
12AG6	12.6v .15a	EEED(14) AEED(7)	22654 12650	31000 42000	6 21	- -	3,4 "	Amp. Osc.	Em* Em*
12AH7	12.6v .15a	CGGG- BEED(9)	00221 12400 00221 12400	45600 25600 45600 25600	4.1v 20 -	1275 - -	7,8 " "	Triode " "	1 2 1 2 Gm* Em*
12AJ6	12.6v .15a	BEED(16) FEED(23)	12650 02650 02654	04000 40000 00000	12 0 0	- - -	3,4 " "	Triode Diode	1 2 Em* Em*
12AL5	12.6v .15a	FEED(13)	20652 24652	04000 02000	0 "	- -	3,4 "	Diode	1 2 Em* Em*
12AL8	12.6v .55a	EEED(12)	03156 42256	42222 22122	11 10	- -	4,5 "	Tetrode	Em*
12AQ5	12.6v .225a	DGGG- BEED(8)	12654 00000	31000	2v 24	2600 -	1,3,4,7 "		Gm* Em*
12AT6	12.6v .15a	EGGG- BEED(23) FEED(19)	12650 22654	04000 00000	1.5v 9 0	800 - -	3,4 " "	Triode " Diode	Gm* Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
12AT7	12.6v .15a	CGGG- BEED(8)	00256 41256 00256 41256	41200 00200 41200 00200	2v 24 24 24	2200	4,5,9	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12AU6	12.6v .15a	BGGG- BEED(20)	12654	32000	.8v 9	2500	3,4		Gm Em
12AU7	12.6v .15a	CGGG- BEED(9)	00256 41256 00256 41256	41200 00200 41200 00200	3v 16 16	2000	4,5,9	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12AV5	12.6v .6a	DGGG- BEED(6)	16204	05300	13.9v 7	2475	2,7		Gm Em
12AV6	12.6v .15a	EGGG- BEED(26) FEED(19)	12652 22652 22654 20000	24000 40000 20000	1.4v 8 0	750	3,4	Triode Diode #1 " #2	Gm Em Em Em
12AV7	12.6v .225a	BGGG- EEBB(10)	00256 41256 00256 41256	41200 00200 41200 00200	1.5v 9	3800	4,5,9	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12AW6	12.6v .15a	BGGG- BEED(27)	12654	32000	1v 7	3000	3,4		Gm Em
12AX4	12.6v .6a	AEED(4)	00204	05600	-	-	7,8		Em
12AX7	12.6v .15a	CGGG- BEED(34)	00256 41256 00256 41256	41200 00200 41200 00200	1.4v 6 6 6	800	4,5,9	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12AY7	12.6v .15a	CGGG- BEED(15)	00256 41256 00256 41256	41200 00200 41200 00200	2.4v 14 14	1000	4,5,6	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12AZ7	12.6v .225a	CGGG- BEED(9)	00056 41256 00056 41256	41200 00000 41200 00000	2v 21 21	2500	4,5,9	Triode #1 " #2 " #1 " #2	Gm Em Em Em
12B4	12.6v .3a	BGGG- AEED(5)	21065	00040	11v 12	4000	2,3,4,5,7		Gm Em
12B7	12.6v .15a	CGGG- BEED(15)	64320	12500	3v 15	1200	1,8		Gm Em
12B8	12.6v .3a	CGGG- BGGG- BEED(10) BEED(18)	26430 06004 26430 06004	05010 25100 05010 25100	3.6v .8v 20 9	1150 1250	2,7	G Cap-pentode Triode " Pentode Triode	Gm Gm Em Em
12BA6	12.6v .15a	BGGG- BEED(12)	12654	32000	1v 18	2000	3,4		Gm Em
12BA7	12.6v .15a	BGAG- BGGG- EEED(16) BEED(6)	30265 41265 32265 41265	21040 02000 21040 22020	0v 7 24	1000 5000	4,5	Amp. Osc. Amp. Osc.	Gm Gm Em Em
12BD6	12.6v .15a	CGGG- BEED(16)	12654	32000	3v 17	1200	3,4		Gm Em
12BE6	12.6v .15a	BGAG- BGGG- EEED(20) BEED(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 6 13	900 4500	3,4	Amp. Osc. Amp. Osc.	Gm Gm Em Em
12BF6	12.6v .15a	EGGG- BEED(9) FEED(20)	12650 02650 02654	04000 40000 00000	3v 24 0	1200	3,4	Triode Diode #1 " #2	Gm Em Em
12BH7	12.6v .3a	DGGG- BEED(7)	00065 41265 00065 41265	41200 00000 41200 00000	6v 15 15	2000	4,5,9	Triode #1 " #2 " #1 " #2	Gm Gm Em Em
12BK5	12.6v .6a	BGGG- BEED(9)	40156	20300	0v 11	4700	3,4,5,7		Gm Em
12BK6	12.6v .15a	BGGG- BEED(9) FEED(17)	12652 22652 22654	24000 42000 22000	.8v 22 0	750	3,4	Triode Diode #1 " #2	Gm Em Em Em
12BL6	12.6v .15a	EEED(11)	12654	32000	5	-	3,4		Em
12BN6	12.6v .15a	EGAG- CGAG- EEED(39)	21653 22653 21653	24000 14000	1.5v 2v 6	450 575	3,4	Limiter Quadrature	Gm Gm Em
12BQ6	12.6v .6a	DGGG- BEED(6)	06031	05204	13.9v 10	2850	2,7	P Cap	Gm
12BR7	12.6v .225a	CGGG- BEED(13) FEED(14)	41256 00056	00000 40200 40200	1.7v 10 0	2500	4,5,9	Triode Diode 1 " 2	Gm Em Em Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
12B06	12.6v .15a	EGGG- BEBD(9) FE8B(17)	12650 22650 22654	04000 40000 00000	6v 18 0	950 - -	3,4 " "	Triode Diode 1 2	Gm Em Em
12B07	12.6v .3a	BGGG- BEBD(12)	21256 04300	04300	1v 10	5600	3,4,5,6,9		Gm Em Em
12BW4	12.6v .45a	AE8B(7)	20056 40056	04020 02020	- -	-	4,5	Diode 1 2	Gm Em Em
12BY7	12.6v .3a	BGGG- BEBD(10)	21265	04304	1v 10	5600	3,4,5,6,9		Gm Em Em
12BZ7	12.6v .3a	CGGG- BEBD(18)	00065 41265 00065 41265 00000	41200 00000 41200 00000	1.5v 6 "	2000	4,5,9 " "	Triode 1 2 2	Gm Em Em
12C5	12.6v .6a	BGGG- BEBD(6)	21650 21650	34000	13.9v 10	2850	2,3,4,5		Gm Em Em
12C8	12.6v .15a	CGGG- BE8D(29) FE8B(20)	26400 26004 26040	35210 25200	4v 11 -	725 -	2,7 "	G. Cap-Pentode Diode 1 2	Gm Em Em
12CA5	12.6v .6a	BGGG- BE8D(7)	21561	34000	2v 8	4000	2,3,4,5		Gm Em Em
12CM6	12.6v .225	DGGG- BE8D(11)	30156	02040	3.3v 11	2600	3,4,5,6,		Gm Em Em
12CN5	12.6v .45a	AE8B(7)	21650	34000	6	-	2,3,4,5		Gm Em Em
12CR6	12.6v .15a	CGGG- BE8D(16) FE8B(18)	22654 24650	31000 00000	2.8v 14 -	1225 -	3,4 "	Pentode Pentode Diode	Gm Em Em
12CS6	12.6v .15a	BGAG- EEAC(15) EEAC(18)	22564 12564 22564 12564	31000 32000 31000 32000	1v 1v 6 4	1000 500 -	3,4 " "	Grid 3 1 3	Gm Em Em
12CT8	12.6v .3a	BGGG- BGGG BE8D(12) BE8D(7)	00056 41256 00056 41256	43120 00000 43120 00000	.8v 1.2v 9 30	4400 3100 -	4,5 " "	Pentode Triode Pentode Triode	Gm Em Em Em
12CU5	12.6v .6a	BGAG- BE8D(6)	21650	34000	1.5v 7	4700	2,3,4,5		Gm Em Em
12CU6	12.6v .6a	DGGG- BE8D(6)	06031	05204	13.9v 10	2850	2,7	P. Cap	Gm Em Em
12D4	12.6v .6a	BE8D(5)	00204	05600	-	-	7,8		Gm Em Em
12DB5	12.6v .6a	BGAG- BE8D(8)	32156	00040	1.5v 7	5675	2,3,4,5,6,7		Gm Em Em
12DM5	12.6v .45a	BGAG-	01356	34000	1.5v	5650	4,5		Gm Em Em
12DQ6	12.6v .6a	BGGG- BE8D(5)	06031	05204	12v 6	3800	2,7	P. Cap	Gm Em Em
12DV8	12.6v .375a	DGGG- BE8D(9) FE8B(20) FE8B(20)	02156 00056 40056	43000 00240 00200	.8v 15 -	800 -	4,5 " "	Tetrode Diode #1 Diode #2	Gm Em Em
12DZ6	12.6v .175a	CGGG- BE8D(6)	12564	32000	10v 5	1100	3,4		Gm Em Em
12E5	12.6v .15a	BE8D(13)	06401	05200	10	-	2,7		Gm Em Em
12EA6	12.6v .175a	CGGG- BE8D(6)	12564	32000	10v 5	1100	3,4		Gm Em Em
12F5	12.6v .15a	CGGG- BE8D(28)	26040	05210	1.4v 8	950	2,7	G. Cap	Gm Em Em
12F8	12.6v .15a	BE8D(16) FE8B(20) FE8B(20)	03456 40056 40056	02120 02000 02000	15 0 0	- -	4,5 " "	Pentode Diode 1 Diode 2	Gm Em Em
12G4	12.6v .15a	DGGG- BE8D(12)	40650	12000	3.5v 9	1640	1,3,4,5		Gm Em Em
12G8	12.6v .4a	EE8B(7)	00056 42156	42100 00000	5 12	- -	4,5,9	Triode 1 2	Gm Em Em
12H6	12.6v .15a	FE8B(14)	06420 06004	05000 05200	- -	- -	2,7	Diode 1 2	Gm Em Em
12J5	12.6v .15a	DGGG- BE8D(12)	26401	05200	3.4v 10	1650	2,7		Gm Em Em
12J7	12.6v .15a	EGGG- BE8D(30)	06432	05210	4.1v 10	775	2,7	G. Cap	Gm Em Em
12J8	12.6v .35a	BE8D(6) FE8B(13)	12356 00056	40000 02400 02040	5 0 0	- -	4,5 "	Tetrode Diode 1 2	Gm Em Em
12K5	12.6v .4a	CGAG- AE8B(4)	21653 21653	04000	10.5v 39	1600	3,4,5,6		Gm Em Em
12K7	12.6v .15a	EGGG- BE8D(28)	06432	05210	2.6v 10	925	2,7	G. Cap	Gm Em Em
12K8	12.6v .15a	BGGG- EE8D(36) BE8D(12)	06431 06231 06432 06221	25210 45200 25210 45200	1v 10 18	640 1525 -	2,7 " "	G. Cap-Heptode Triode Heptode Triode	Gm Em Em Em
12L6	12.6v .6a	BGAG- BE8D(6)	26431	05200	1.4v 7	5675	2,7		Gm Em Em
12L8	12.6v .15a	BGGG- BE8D(11)	12203 22143 12203 22143	65400 65000 65400 65000	.8v 21 -	1375 -	6,7 "	Pentode #1 #2 #1 #2	Gm Em Em Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
12Q7	12.6v .15a	EGGG- BEED(28) FEED(20)	26400 26040 26004	05210 05200	2.2v 9 -	525 - -	2,7 " "	G Cap - Triode Diode #1 " #2	Gm* Em* Em*
12R5	12.6v .6a	BGAG- BEED(7)	21650	34000	2v 6	4300 -	2,3,4,5		Gm* Em*
12S8	12.6v .15a	EGGG- BEED(33) FEED(20)	02000 02402 02042 42002	45610 05600	.8v 8 - -	575 - - -	7,8 " " "	G Cap - Triode Diode #1 " #2 " #3	Gm* Em* Em* Em*
12SA7	12.6v .15a	BGAG- BGGG- EED(21) BEED(8)	06432 06041 26432 26241	25100 25200 25100 25200	0v 8 14	775 2850 -	2,7 " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
12SC7	12.6v .15a	EGGG- BEED(20)	02014 04102 02014 04102	25600 "	.9v 14 "	825 - -	7,8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
12SF5	12.6v .15a	BGGG- BEED(26)	22104	05600	.8v 8	975	7,8		Gm* Em*
12SF7	12.6v .15a	BGGG- BEED(14) FEED(20)	21230 00204	45600 05600	.8v 18 -	1275 -	7,8 "	Pentode Diode	Gm* Em* Em*
12SG7	12.6v .15a	BGGG- BEED(22)	26212	35400	.7v 7	2550	2,3,4,5,7		Gm* Em*
12SH7	12.6v .15a	BGGG- BEED(20)	26212	35400	.6v 9	2525	2,3,4,5,7		Gm* Em*
12SJ7	12.6v .15a	CGGG- BEED(14)	06212	35400	3.2v 17	1050	2,7		Gm* Em*
12SK7	12.6v .15a	CGGG- BEED(15)	06212	35400	1.7v 15	1250	2,7		Gm* Em*
12SL7	12.6v .15a	BGGG- BEED(24)	02014 14202 02014 14202 05600	25600 05600 25600 05600	.4v 10 "	1000 - -	7,8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
12SN7	12.6v .3a	CGGG- BEED(9)	02014 14202 02014 14202 05600	25600 05600 25600 05600	3.7v 17 "	1650 - -	7,8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
12SQ7	12.6v .15a	EGGG- BEED(30) FEED(19)	21200 20204 20240	45600 05600	.9v 9 -	725 - -	7,8 " "	Triode Diode #1 " #2	Gm* Em* Em*
12SR7	12.6v .15a	CGGG- BEED(12) FEED(20)	21200 20204 20240	45600 05600	4.4v 13 -	1225 -	7,8 " "	Triode Diode #1 " #2	Gm* Em* Em*
12SW7	12.6v .15a	CGGG- BEED(12) FEED(20)	21200 20204 20240	45600 05600	4.4v 13 -	1225 -	7,8 " "	Triode Diode #1 " #2	Gm* Em* Em*
12SX7	12.6v .3a	CGGG- BEED(9)	02014 14202 02014 14202 05600	25600 05600 25600 05600	4.4v 17 "	1650 -	7,8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
12SY7	12.6v .15a	BGAG- BGGG- EED(26) BEED(8)	06432 06041 26432 26041	25100 25200 25100 25200	0v 8 14	775 2850 -	2,7 " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
12U7	12.6v .15a	BEED(15)	00256 41256	41200 00200	14 "	- -	4,5,9	Triode 1 Triode 2	Em* Em*
12V6	12.6v .225a	DGGG- BEED(8)	26431	05200	3.2v 22	2625	2,7		Gm* Em*
12W6	12.6v .6a	BGAG- BEED(6)	06431	05200	1.49v 7	5650	2,7		Gm* Em*
12X4	12.6v .3a	AEBB(5) A	40650 00650	02000 42000	- -	- -	3,4	Plate #1 " #2	Em* Em*
12Z3	12.6v .3a	AEBB(1)	64250	00000	0	-	1,4		Em*
12Z5	12.6v .3a	AEBB(4)	60202 64202	45000 05000	0 0	- -	1,4,7	Plate #1 " #2	Em* Em*
14A4	12.6v .15a	DGGG- BEED(9)	64000	12500	3.8v 17	1625	1,8		Gm* Em*
14A5	12.6v .15a	DGGG- BEED(9)	64300	12500	1.2v 22	1925	1,8		Gm* Em*
14A7	12.6v .15a	CGGG- BEED(15)	64320	12500	2.9v 15	1275	1,8		Gm* Em*
14AF7	12.6v .15a	DGGG- DGGG- BEED(12)	60001 62410 60001 62410	42500 00500 42500 00500	4v " 10 "	1700 - -	1,8 " "	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
14B6	12.6v .15a	BGGG- BEED(36) FEED(19)	64100 60004 60000	02500 02500 42500	1.2v 8 -	750 - -	1,4,7,8 " "	Triode Diode #1 " #2	Gm* Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
14B8	12.6v .15a	EGAG- EEBD(18) BEED(24)	64023 60413 64223 62412	12500 22500 12500 22500	0v 20	800 750	1,8	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
14C5	12.6v .225a	BGGG- BEED(8)	64300	12500	4.8v 22	2750	1,8		Gm* Em*
14C7	12.6v .15a	BGGG- BEED(19)	64320	12500	1v 13	1500	1,8		Gm* Em*
14E6	12.6v .15a	CGGG- BEED(14) FEED(20)	64100 60004 60000	02500 " 42500	3.8v 10 0	1250	1,4,7,8	Triode Diode #1 Diode #2	Gm* Em* Em* Em*
14E7	12.6v .15a	CGGG- BEED(19) FEED(20)	64003 60400 60040	12500 02500	3.4v 15 -	850	1,8	Pentode Diode #1 Diode #2	Gm* Em* Em* Em*
14F7	12.6v .15a	EGGG- BEED(24)	60001 62410 60001 62410	42500 00500 42500 00500	1v 10	800	1,8	Triode #1 Triode #2 Triode #1 Triode #2	Gm* Em* Em* Em*
14F8	12.6v .15a	BGGG- BEED(11)	06002 16420 06002 16420	45100 05000 45100 05000	1v 9	3250	2,7	Triode #1 Triode #2 Triode #1 Triode #2	Gm* Em* Em* Em*
14H7	12.6v .15a	BGGG- BEED(16)	64320	12500	1.4v 11	2500	1,8		Gm* Em*
14J7	12.6v .15a	CGGG- BEED(29) BEED(14)	64023 60413 64223 62412	12500 22500 12500 22500	1.5v 3.4v 13 12	475 650	1,8	Heptode Triode Heptode Triode	Gm* Em* Em* Em*
14N7	12.6v .3a	CGGG- BEED(9)	60201 62410 60201 62410	42500 20500 42500 20500	4.1v 17	1650	1,8	Triode #1 Triode #2 Triode #1 Triode #2	Gm* Em* Em* Em*
14Q7	12.6v .15a	BGAG- BGGG- EEED(23) BEED(8)	64320 60410 64322 62412	12500 22500 12500 22500	0v 6 13	650 3450	1,8	Amp. Osc. Amp. Osc.	Gm* Em* Em* Em*
14R7	12.6v .15a	BGGG- BEED(19) FEED(19)	64003 60400 60040	12500 02500	1.4v 11 -	1950	1,8	Pentode Diode #1 Diode #2	Gm* Em* Em* Em*
14S7	12.6v .15a	CGGG- BEED(29) BEED(12)	64023 60413 64223 62412	12500 22500 12500 22500	3.1v 2.1v 9 18	975	1,8	Heptode Triode Heptode Triode	Gm* Em* Em* Em*
14V7	12.6v .2a	BGGG-	64320	12500	.2v	2850	1,8		Gm*
14W7	12.6v .225a	BGGG- BEED(19)	64322	12500	.2v 8	2875	1,4,7,8		Gm* Em*
14X7	12.6v .15a	BGGG- BEED(44) AEED(19)	64120 60020 60024	00500 42500 02500	1v 9 -	650	1,8	Triode Diode #1 Diode #2	Gm* Em* Em* Em*
14Y4	12.6v .3a	AEED(3)	60400 60000	02500 42500	- -	-	1,8	Plate #1 Plate #2	Em* Em*
14Z3	12.6v .3a	AEED(1)	64250	00000	0	-	1,4		Em*
15	2v .22a	EGAG- BEED(33)	64325	00010	0v 14	450	1,5	G Cap	Gm* Em*
15A6	12.6v .25a	BGGG-	31265	24000	1v	6200	4,5		Gm*
17	2.5v .5a	BEED(9) Test in the life position.	60150	00004	17	-	1,5		Em*
17AV5	20v .45a	DGGG- BEED(6) Test in the life position.	16204	05300	13.9v 7	2475	2,7		Gm* Em*
17AX4	20v .45a	AEED(4) Test in the life position.	00204	05600	-	-	7,8		Em*
17C5	20v .45a	BGAG- BEED(6) Test in the life position.	21651	34000	1.5v 5	4100	2,3,4,5		Gm* Em*
17CA5	20v .45a	BGGG- BEED(7) Test in the life position.	21561	34000	2v 8	3125	2,3,4,5		Gm* Em*
17D4	20v .5a	BEED(5) Test in the life position.	00204	05600	-	-	7,8		Em*
17DQ6	20v .45a	BGGG- BEED(5) Test in the life position.	06031	05204	12v 6	3800	2,7	P. Cap	Gm* Em*
17H3	20v .3a	EEED(6) Test in the life position.	20456	00000	0	-	3,4,5,8		Em*
17L6	20v .45a	BGAG- BEED(6) Test in the life position.	06431	05200	1v 7	4350	2,7		Gm* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
17R5	20v .45a	BGAG- BEED(7)	21650	34000	2v 6	3150	2, 3, 4, 5		Gm Em*
18	12.6 .27a	BEED(9)	64312	50000	28	-	1, 6		Em*
18A5	20v .3a	DGGG- BEED(7)	16204	05300	14v 5	3000	2, 7		Gm* Em
19	2v .26a	EGGG- BEED(17)	60014 64100 60014 64100	50000	4.8v 12	625	1, 6	Triode #1 " #2 " #2	Gm Gm Em* Em*
19AU4	20v .62a	EEBB(4)	22224	26500	-	-	7, 8		Em*
19BG6	20v .3a	BGGG- BEED(5)	06201	05304	4.4v 32	3825	2, 7	P Cap	Gm Em*
19C8	20v .15a	CGGG- EEBB(40) FEED(13)	00065	02140	1.7v 4 0	800	4, 5	Triode Diode #1 " #2 " #3	Gm* Em Em* Em* Em*
19J6	20v .15a	BGGG- BEED(10)	04651 04652 04651 04652	22000 12000 22000 12000	2.7v 10	3400	3, 4	Triode #1 " #2 " #2	Gm* Gm* Em Em
19T8	20v .15a	CGGG- BEED(34) FEED(12)	00065	02140	2v 7 0	700	4, 5	Triode Diode #1 " #2 " #3	Gm* Em Em* Em* Em*
19V8	20v .13a	CGGG- EEBB(37) FEED(18) FEED(12)	40265 00265 00065 04265	10000 00040 04200 00000	2v 4 0 "	775	4, 5	Triode Diode #1 " #2 " #3	Gm* Em Em* Em* Em*
19X8	20v .25a	BGGG- BEED(23) BEED(11)	20056 21456 20056 21456	21340 20000 21340 20000	1v 2v 6 8	3000 3500	4, 5	Pentode Triode Pentode Triode	Gm* Gm* Em Em
20	2v .13a	BEED(11)	64150	00000	20	-	1, 4		Em*
RK20A	7.5v 3.25a	DGGG-	63125	00004	0v	1600	1, 5	P Cap	Gm*
21A6	20v .27a	BGGG-	01265	00324	13v	3700	4, 5	P Cap	Gm*
22	3v .132a	EGAG- BEED(18)	64350	00010	3.8v 25	300	1, 4	G Cap	Gm* Em
24A	2.5v 1.75a	BGGG- BEED(18)	64325	00010	1v 15	600	1, 5	G Cap	Gm* Em
25A6	25v .3a	CGGG- BEED(7)	06431	05200	11.3v 22	1475	2, 7		Gm Em*
25A7	25v .3a	CGGG- BEED(8) AEED(2)	06431 26000	25200 45000	12.9v 18	1150	2, 7	Pentode Diode	Gm Em* Em* Em*
25AC5	25v .3a	BGGG- BEED(13)	06401	05200	.8v 15	975	2, 7		Gm Em*
25AV5	25v .3a	DGGG- BEED(6)	16204	05300	13.9v 7	2475	2, 7		Gm Em*
25AX4	25v .3a	AEED(3)	00204	05600	-	-	7, 8		Em*
25B5	25v .3a	CGGG- BEED(8) BEED(6)	64312 62412 64312	50000	3.6v 29 27	1575	1, 6	Input Output	Gm Em* Em*
25B6	25v .3a	DGGG- BEED(5)	06431	05200	16.9v 9	2525	2, 7		Gm Em*
25B8	25v .15a	EGGG-	26430	05010	3.4v .9v	1275	2, 7	G Cap-Pentode Triode	Gm* Gm*
25BK5	25v .3a	BGGG- BEED(9)	40165	20300	0v 11	4600	3, 4, 5, 7		Gm Em*
25BQ6	25v .3a	DGGG- BEED(5)	06031	05204	13.9v 10	2850	2, 7	P Cap	Gm Em*
25C5	25v .3a	BGAG BEED(6)	21651	34000	1.5v 5	5600	2, 3, 4, 5		Gm Em*
25C6	25v .3a	DGGG- BEED(6)	06431	05200	11.7v 9	3150	2, 7		Gm Em*
25CA5	25v .3a	BGGG- BEED(7)	21561	34000	2v 8	4000	2, 3, 4, 5		Gm Em*
25CD6	25v .6a	BEED(6)	06201	05304	-	-	2, 7	P. Cap	Em*
25CU6	25v .3a	DGGG- BEED(6)	06031	05204	13.9v 10	2850	2, 7	P. Cap	Gm Em*
25D8	25v .15a	CGGG- BGGG- BEED(12) BEED(17) FEED(19)	26430 26001 26430 26001 26000	05010 45000 05010 45000 05400	2.9v 1v 20 5	1225 725	2, 7	G. Cap-Pentode Triode G. Cap- Pentode Triode Diode	Gm* Gm* Em Em* Em*
25DN6	25v .6a	BGAG- BEED(6)	06201	05304	7.5v 0	5650	2, 7	P. Cap	Gm* Em

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
25DQ6	25v .3a	BGGG- BEED(5)	06031	05204	12v 6	3800	2,7	P _h Cap	Gm Em*
25EC6	25v .6a	BGGG- BEED(6)	06201	05304	22.5v 5	3100	2,7	P _h Cap	Gm Em*
25F5	25v .15a	CGGG- BEED(7)	21560	34000	10.5v 10	2500	2,3,4,5		Gm Em
25L6	25v .3a	BGAG- BEED(6)	26431	05200	1.4v 7	5675	2,7		Gm Em*
25N6	25v .3a	CGGG- BEED(6)	06431	05200	2.4v 26	1575	2,7	Output	Gm Em*
25W4	25v .3a	BEED(8) BEED(5)	00241 00204	" 05600	29 -	-	" 7.8	Input	Em* Em*
25W6	25v .3a	BGAG- BEED(5)	26431	25200	1.5v 7	5600	2,7		Gm Em*
25X6	25v .15a	AEED(3)	06420 06024	05200	- -	-	2,7	Plate #1 #2	Em* Em*
25Y4	25v .15a	AEED(1)	06004	05200	0	-	2,7		Em*
25Y5	25v .3a	AEED(5)	60224 64220	50000	- -	-	1,6	Plate #1 #2	Em* Em*
25Z3	25v .3a	AEED(1)	64250	00000	0	-	1,4		Em*
25Z4	25v .3a	AEED(3)	06004	05200	-	-	1,7		Em*
25Z5	25v .3a	AEED(2)	60224 64220	50000	- -	-	1,6	Plate #1 #2	Em* Em*
25Z6	25v .3a	AEED(3)	06004 06420	05200	- -	-	2,7	Plate #1 #2	Em* Em*
26	1.5v 1.05a	EGGG- BEED(14)	64150	00000	10v 12	730	1,4		Gm Em
26A6	25v .07a	CGGG- BEED(14)	12654	32000	1.3v 14	2400	3,4		Gm Em
26A7	25v .6a	CGAG- AEED(5)	12203 22143 12203 22143	65400 65000 65400 65000	2.9v 10	3475	6,7 " " "	Triode #1 #2 " " "	Gm Gm Em* Em* Em*
26BK6	25v .068a	BGGG- BEED(9) FEED(17)	12650 02650 02654	04000 40000 00000	.8v 22 -	800	3,4 " "	Triode Diode #1 #2	Gm Em* Em* Em*
26C6	25v .068a	CGGG- BEED(12) FEED(20)	12650 22650 22654	04000 40000 00000	4v 11 0	1200	3,4 " "	Triode Diode #1 #2	Gm Em Em* Em*
26D6	25v .068a	CGAG- BGGG- EED(21) BEED(8)	22654 12650 22654 12650	31000 42000 31000 42000	0v 2v 8 14	900 4500	3,4 " " "	Amp. Osc. Amp. Osc.	Gm* Gm* Em Em
26E6	25v .3a	BGGG-	06431	05200	10.5v	3800	2,7		Gm*
26Z5W	25v .2a	AEED(5)	60224 64220	50000	- -	-	4,5,9	Plate #1 #2	Em* Em*
27	2.5v 1.75a	CGGG- BEED(13)	64125	00000	10v 11	650	1,5		Gm Em
28D7	25v .36a	DGAG- AEED(6)	62304 61340 62304 61340	21500 22500 21500 22500	2.1v 25 "	2100	1,8 " " "	Pentode #1 #2 " " "	Gm Gm Em* Em*
28Z5	25v .2a	AEED(6)	60000 60400	42500 02500	- -	-	1,4,8	Plate #1 #2	Em* Em*
30	2v .06a	EGGG- BEED(17)	64150	00000	10v 11	575	1,4		Gm Em
31	2v .13a	EGGG- BEED(8)	64150	00000	11v 22	600	1,4		Gm Em*
32	2v .06a	EGAG- BEED(30)	64350	00010	3v 12	400	1,4	G Cap	Gm Em*
32L7	35v .3a	CGGG- BEED(7) AEED(2)	06431 26000	05200 45200	9.9v 10 -	3000	2,7 " "	Pentode Diode	Gm Em* Em*
33	2v .26a	EGGG- BEED(9)	64135	00000	7v 23	900	1,5		Gm Em*
RK33	6.3v .6a	EGGG- BEED(8)	62400 62014 62400 62014	25010 25000 25010 25000	8v 19 "	900	1,7 " "	G Cap-Triode #1 Triode #2 " "	Gm Gm Em* Em*
34	2v .06a	EGAG- BEED(17)	64350	00010	2v 26	380	1,4	G Cap	Gm* Em
EL34								See 6CA7	
GZ34								See 5AR4	
35/51	2.5v 1.75a	EGGG- BEED(4)	64325	00010	4v 27	650	1,5	G Cap	Gm* Em
35A5	35v .15a	BGGG- BEED(11)	64300	12500	11.4v 5	3750	1,8		Gm Em*
35B5	35v .15a	CGGG- BEED(8)	12654	31000	12v 12	2850	1,3,4,7		Gm Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
35C5	35v .15a	CGGG- BEED(7)	21651	34000	11v 9	2800	2,3,4,5		Gm Em*
35CD6	35v .45a	BGGG- BEED(5)	06201	05304	17v 0	4125	2,7	P. Cap	Gm Em*
35L6	35v .15a	BGGG- BEED(6)	06431	05200	6.4v 12	3675	2,7		Gm Em*
35W4	35v .15a	AEED(1)	00564	72000	0	-	3,4,6		Em*
35Y4	35v .15a	AEED(2)	64000	02500	-	-	1,4,8		Em*
35Z3	35v .15a	AEED(1)	64000	02500	-	-	1,8		Em*
35Z4	35v .15a	AEED(1)	06004	05200	-	-	2,7		Em*
35Z5	35v .15a	AEED(1)	06704	05200	-	-	2,3,7		Em*
35Z6	35v .3a	AEED(0)	06420 06004	05000 05200	- -	-	2,7	Plate #1 Plate #2	Em*
36	6.3v .3a	CGGG- BEED(15)	64325	00010	4v 21	650	1,5	G Cap	Gm Em*
37	6.3v .3a	EGGG- BEED(9)	64125	00000	10v 17	550	1,5		Gm Em*
38	6.3v .3a	EGGG- BEED(10)	64325	00010	8v 32	650	1,5	G Cap	Gm Em*
39/44	6.3v .3a	EGGG- BEED(13)	64325	00010	5v 27	600	1,5	G Cap	Gm Em*
40	5v .25a	EGGG- BEED(38)	64150	00000	6v 9	130	1,4		Gm Em*
40Z5	50v	AEED(1)	06004	05200	0	-	2,3,7		Em*
41	6.3v .4a	EGGG- BEED(10)	64312	50000	7.2v 22	1025	1,6		Gm Em*
42	6.3v .7a	CGGG- BEED(9)	64312	50000	1.8v 24	1625	1,6		Gm Em*
43	25v .3a	CGGG- BEED(7)	64312	50000	13.8v 22	1475	1,6		Gm Em*
45	2.5v 1.5a	EGGG- BEED(6)	64150	00000	20v 28	1000	1,4		Gm Em*
45Z3	50v .08a	AEED(3)	64020	45000	0	-	1,2,6,7		Em*
45Z5 /40Z5	50v .15a	AEED(1)	06704	05200	-	-	2,3,7		Em*
46	2.5v 1.75a	EGGG- BEED(7)	64135	00000	6v 22	1100	1,5		Gm Em*
47	2.5v 1.75a	EGGG- BEED(4)	64135	00000	3.5v 30	1300	1,5		Gm Em*
48	25v .3a	CGGG- BEED(5)	64312	50000	24.5v 18	1275	1,6		Gm Em*
49	2v .12a	EGGG- BEED(10)	64135	00000	12v 21	720	1,5		Gm Em*
50	7.5v 1.25a	EGGG- BEED(6)	64150	00000	22v 34	1000	1,4		Gm Em*
50A5	50v .15a	BGAG- BEED(6)	64300	12500	1.4v 11	5675	1,8		Gm Em*
50B5	50v .15a	BGAG- BEED(6)	12654	31000	1.5v 9	5600	1,3,4,7		Gm Em*
50BK5	50v .15a	BGGG- BEED(9)	40156	20300	0v 11	4700	3,4,5,7		Gm Em*
50C5	50v .15a	BGAG- BEED(6)	21651	34000	1.5v 5	5600	2,3,4,5		Gm Em*
50C6	50v .15a	DGGG- BEED(11)	26431	05200	11.7v 9	3150	2,7		Em*
50L6	50v .15a	BGAG- BEED(6)	06431	05200	1.4v 11	5650	2,7		Gm Em*
50X6	50v .15a	AEED(2)	62400 62000	02500 42500	- -	-	1,8	Plate #1 Plate #2	Em*
50Y6	50v .15a	AEED(2)	06420 06004	05000 05200	- -	-	2,7		Em*
50Y7	50v .15a	BEED(5)	05420 05024	76200	- -	-	2,6,7		Em*
50Z7	50v .15a	AEED(2)	06420 06024	05200	- -	-	2,6,7	Plate #1 Plate #2	Em*
51 /51S/35	2.5v 1.75a	EGGG- BEED(12)	64325	00010	4v 28	630	1,5	G Cap	Gm Em*
52	6.3v .3a	EGGG-	64135	00000	4v	1500	1,5		Gm*
53	2.5v 2a	EGGG- BEED(7)	62021 64120 62021 64120	45000 25000 45000 25000	2.4v 29	925	1,7	Triode #1 " #2 " #1 " #2	Gm Em*
55	2.5v 1a	EGGG- BEED(10) FEED(19)	64002 60402 60042	50010 50000	12.4v 20	625	1,6	G Cap-Triode Diode #1 " #2	Gm Em*
56	2.5v 1a	EGGG- BEED(13)	64125	00000	6v 10	925	1,5		Gm Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
56A	6.3v .4a	EGGG- BEED(12)	64125	00000	6v 10	900	1.5		Gm ⁺ Em ⁺
57	2.5v 1a	EGGG- BEED(15)	64322	50010	3.6v 18	775	1.6	G Cap	Gm ⁺ Em ⁺
57A	6.3v .4a	EGGG- BEED(15)	64322	50010	3v 18	800	1.6	G Cap	Gm ⁺ Em ⁺
58	2.5v 1a	EGGG- BEED(15)	64322	50010	3.9v 18	925	1.6	G Cap	Gm ⁺ Em ⁺
58A/58AS	6.3v .4a	EGGG- BEED(15)	64322	50010	4v 18	900	1.6	G Cap	Gm ⁺ Em ⁺
59	2.5v 2a	EGGG- BEED(7)	64312	25000	3.4v 22	1275	1.7		Gm ⁺ Em ⁺
RK61	1.5v .052a	EEBB(11)	46152	22200	-	-	2.4		Em ⁺
HY65	6.3v .85a	DGGG-	06031	05204	0v	1900	2.7	P Cap	Gm ⁺
KT66	6.3v	BGGG- BEED(8)	25431	06200	3v 11	4000	2.7		Gm ⁺ Em ⁺
HY69	6.3v 1.5a	DGGG- BEED(6)	63125	00004	0v 35	1850	1.5	P Cap	Gm ⁺ Em ⁺
70A7	75v .15a	DGGG- BEED(6) AEED(0)	06431 46000	05200 05000	15.4v 12	1925	2.6	Pentode Meter Rev.	Gm ⁺ Em ⁺ Em ⁺
70L7	75v .15a	DGGG- BEED(6) AEED(1)	06431 26000	25000 05400	12.5v 12	3150	2.7	Pentode Diode	Gm ⁺ Em ⁺ Em ⁺
71	5v .25a	BEED(5)	64150	00000	30	-	1.4		Em ⁺
71A	5v .25a	EGGG- BEED(6)	64150	00000	25v 30	1050	1.4		Gm ⁺ Em ⁺
75	6.3v .3a	EGGG- BEED(37) FEED(20)	64002 60402 60042	50010 50000	1.1v 8	475	1.6	G Cap-Triode Diode #1 #2	Gm ⁺ Em ⁺ Em ⁺ Em ⁺
HY75	6.3v 2.5a	GEED(7)	06000	05014	-	-	2.7	G Cap Left P Cap Right	Em ⁺
76	6.3v .3a	EGGG- BEED(13)	64125	00000	6v 10	930	1.5		Gm ⁺ Em ⁺
77	6.3v .3a	EGGG- BEED(36)	64322	50010	3.2v 8	775	1.6	G Cap	Gm ⁺ Em ⁺
78	6.3v .3a	EGGG- BEED(26)	64322	50010	4v 10	875	1.6	G Cap	Gm ⁺ Em ⁺
79	6.3v .6a	CGGG- BEED(8)	60024 64120 60024 64120	50010 50000 50010 50000	1.7v 25	625	1.6	G Cap-Triode #1 #2 " " " #1 " " " #2	Gm ⁺ Gm ⁺ Em ⁺ Em ⁺ Em ⁺
80	5v 2a	AEED(8)	64050 60450	00000	0	-	1.4		Em ⁺ Em ⁺
E80CC E80F EC80 EZ80								See 6085 See 6084 See 604 See 6V4	
81	7.5v 1.25a	AEED(11)	64050	00000	0	-	1.4		Em ⁺
EC81 ECC81 EZ81								See 6R4 See 12AT7 See 6CA4	
82	2.5v 3a	AEED(2)	64050 60450	00000	0	-	1.4		Em ⁺ Em ⁺
ECC82								See 12AU7	
83	5v 3a	AEED(2)	64050 60450	00000	0	-	1.4		Em ⁺ Em ⁺
83V	5v 2a	AEED(2)	64050 60450	00000	0	-	1.4		Em ⁺ Em ⁺
ECC83								See 12AX7	
84/6Z4	6.3v .5a	AEED(5)	60425 64025	00000	0	-	1.5	Plate #1 #2	Em ⁺ Em ⁺
G84/2Z2	2.5v 1.5a	AEED(9)	64050	00000	-	-	1.4		Em ⁺
EL84								See 68Q5	
85	6.3v .3a	EGGG- BEED(10) FEED(19)	64002 60402 60042	50010 50000	10.1v 20	625	1.6	G Cap-Triode Diode #1 #3	Gm ⁺ Em ⁺ Em ⁺ Em ⁺
89/89Y	6.3v .4a	EGGG- BEED(9)	64322	50010	6.3v 25	975	1.6	G Cap	Gm ⁺ Em ⁺
99	3v .06a	EGGG- BEED(15)	64150	00000	16v 16	275	1.4		Gm ⁺ Em ⁺
112A	5v .25a	EGGG-	64150	00000	14v	1000	1.4		Gm ⁺
117L7/M7	117v .09a	CGGG- BEED(7) AEED(2)	06413 26000	05200 45000	11.9v 15	2525	2.7	Pentode Diode	Gm ⁺ Em ⁺ Em ⁺

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
117N7	117v .09a	CGGG- BEED(7) AEED(10)	06413 06000	25000 05400	7.5v 9 -	3150 - -	2,7 " "	Pentode Meter Rev..Diode	Gm Em*
117P7	117v .09a	DGGG- BEED(7) AEED(10)	06413 06000	25000 05400	7.5v 15 -	2500 - -	2,7 " "	Pentode Meter Rev..Diode	Gm Em*
117Z3	117v .04a	AEED(1)	00654	20000	0	-	3,4	1,5 may short	Em*
117Z4	117v .04a	AEED(1)	06004	05200	-	-	2,7		Em*
117Z6	117v .075a	AEED(1)	06420 06004	05000 05200	- -	- -	2,7 "	Plate #1 #2	Em* Em*
X155	6.3v	BGGG- BEED(11)	41256 00056 41256 00056 41220	00020 41220 00020 41220	1.7v 9 "	5000 - -	4,5 " "	Triode 1 2 2	Gm Em* Em* Em*
182B / 482B	5v 1.25a	BEED(6)	64150	00000	25	-	1,4		Em*
183/483	5v 1.25a	BEED(6)	64150	00000	28	-	1,4		Em*
205D	4.3v 1.5a	BEED(9)	64150	00000	28	-	1,4	Bayonet pin to- ward top left.	Em*
484-485	3v 1.3a	BEED(13)	64125	00000	11	-	1,5		Em*
CK501AX	1.1v .026a	EEED(33)	43615	00000	6	-	3,5		Em*
CK502AX	1.1v .03a	CGAG- EEED(32)	43615	00000	4v 5	350	3,5		Gm Em*
CK503AX	1.1v .03a	CGAG- EEED(32)	43615	00000	4v 5	350	3,5		Gm Em*
CK505AX	.6v .03a	EEED(41)	43615	00000	7	-	3,5		Em*
CK506AX	1.1v .045a	EGAG- EEED(13)	43615	00000	9v 8	300	3,5		Gm Em*
CK507AX	1.1v .04a	EEED(18)	43615	00000	7	-	3,5		Em*
CK511X	1.1v .046a	EEED(48)	43612	50000	9	-	3,6		Em
CK512AX	.6v .02a	FEED(50)	43615	00000	6	-	3,5		Em*
CK520AX	.6v .05a	EEED(48)	43615	00000	7	-	3,5		Em*
CK521AX	1.1v .046a	EEED(11)	43615	00000	12	-	3,5		Em*
CK522AX	1.1v .015a	EEED(21)	43615	00000	6	-	3,5		Em*
CK527AX	1.1v .015a	FEED(29)	43615	00000	11	-	3,5		Em*
CK553- AXA/2E31	1.1v .046a	EEED(23)	43615	00000	5	-	3,5		Em*
CK556AX	1.1v .12a	CGGG- EEED(9)	45160	00000	7v 12	1000	2,4		Gm Em*
CK568AX	1.1v .07a	CGGG- EEED(18)	45160	00000	9v 7	450	2,4		Gm Em*
CK569AX	1.1v .05a	CGAG- EEED(15)	43615	00000	1v 12	700	3,5		Gm Em*
CK605CX	6.3v .2a	BGGG- AEED(16)	43652	21000	2v 10	3000	3,4		Gm Em*
CK606BX	6.3v .15a	FEED(12)	46520	00000	0	-	2,3		Em*
CK608CX	6.3v .2a	BGGG- BEED(7)	40651	20000	3.8v 13	3000	3,4		Gm Em*
CK619CX	6.3v .2a	BGGG- EEED(12)	46512	00000	.6v 8	2500	2,3		Gm Em*
717A	6.3v .175a	DGGG- BEED(23)	06210	35400	0v 5	2100	2,3,5,7		Gm Em*
Z729	6.3v .2a	CGGG- CEED(40)	30265	40210	1v 7	1000	2,4,5,7		Gm Em*
801A	7.5v 1.25a	EGGG- BEED(9)	64150	00000	0v 21	1000	1,4		Gm Em*
802	6.3v .9a	EGGG- BEED(7)	60312	25004	3.5v 26	1200	1,7	P Cap	Gm Em*
807	6.3v .9a	DGGG- BEED(9)	63125	00004	5v 17	2500	1,5	P Cap	Gm Em*
809	6.3v 2.5a	CGGG- BEED(20)	60150	00004	0v 15	1000	1,4	P Cap	Gm Em*
811	6.3v 4a	EGGG-	60150	00004	0v	800	1,4	P Cap	Gm
812	6.3v 4a	EGGG- BEED(9)	60150	00004	0v 15	1400	1,4	P Cap	Gm Em*
814	10v 3.25a	DGGG-	63125	00004	0v	2000	1,5	P Cap	Gm*
815	12.6v .8a	DGGG- GEED(9)	50230 51230 50230 51230	01604 00604 01604 00604	8v " 10 "	2500 - -	1,3,5,6,8 " "	Left P Cap Right P Cap Left P Cap Right P Cap	Gm Gm Em* Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
816	2.5v 2a	AE8B(1)	60050	00004	0	-	1,4	P Cap	Em*
SD828A	6.3v .15a	BGGG-	42613	50000	3v	2000	4,6		Gm*
SD828E /5634	6.3v .15a	BGGG-	22163	50004	2.5v	1800	4,6	P Cap	Gm*
834	7.5v 3.1a	EGGG-	60050	00014	0v	1000	1,4	P Cap Top G Cap Bottom	Gm*
837 /RK44	12.6v .7a	BGGG- BE8D(9)	60312	25004	1v 18	2500	1,7	P Cap	Gm Gm*
841	7.5v 1.25a	EGGG- BE8E(6)	64150	00000	0v 40	600	1,4		Gm Gm*
843	2.5v 2.5a	EGGG- BE8D(9)	64125	00000	1.3v 21	1000	1,5		Gm Gm*
864	1.1v .25a	CGGG- BE8D(14)	64150	00000	13v 16	400	1,4		Gm Gm*
865	7.5v 2a	EGGG-	63150	00004	7v	400	1,4	P Cap	Gm*
866JR	2.5v 2.5a	AE8B(5)	64050	00000	0	-	1,4		Em*
884	6.3v .6a	BE8D(5)	06402	05200	0	-	2,7	Thyratron	Em*
885	2.5v 1.4a	BE8D(5)	64225	00000	0	-	1,5	Thyratron	Em*
SD917A /5637	6.3v .15a	BGGG-	41652	00000	2v	1700	3,4		Gm*
SN944 /5633	6.3v .15a	BGGG-	22163	50004	2v	1500	4,6	P Cap	Gm*
SN947D /5640	6.3v .45a	BGGG-	12604	53200	11v	3000	3,6		Gm*
950	2v .12a	EGGG- BE8D(9)	64135	00000	11v 30	600	1,5		Gm Em*
951/1B4	2v .06a	EGGG- BE8D(30)	64350	00010	2.2v 14	500	1,4	G Cap	Gm Em*
SN953D	6.3v .15a	BGGG-	12604	53000	3v	3700	3,6		Gm*
954	6.3v .15a	EGGG- BE8D(29)	63252	10004	3.2v 9	725	1,4	P Cap	Gm Em*
955	6.3v .15a	EGGG- BE8D(11)	64152	00000	4.7v 15	1225	1,4		Gm Em*
SN955B	6.3v .45a	BGGG-	10620 01624	54200 50200	1.5v	2300	3,6	Triode #1 #2	Gm Gm*
956	6.3v .15a	CGGG- BE8D(12)	63252	10004	2.2v 22	975	1,4	P Cap	Gm Em*
957	1.5v .06a	CGGG- BE8D(16)	64122	00000	8.2v 14	425	1,4,5		Gm Em*
SN957A	6.3v .15a	BGGG-	42516	00000	5v	1600	3,5		Gm*
958	1.5v .12a	CGGG- BE8D(9)	64155	00000	9.7v 17	775	1,4,5		Gm Em*
959	1.5v .06a	EGAG- BE8D(30)	63255	10004	3v 14	375	1,4,5	P Cap	Gm Em*
1005 /CK1005	6.3v .1a	GE8E(5)	00400 00004	50600	-	-	6,8	Plate #1 #2	Em Em*
SN1006	6.3v .15a	BGGG-	42516	00000	1.5v	1500	3,5		Gm*
CK1013	0v	GE8E(8)	00020	02004	-	-	1,2,3,5 6,7	P Cap	Em*
1201/7E5	6.3v .15a	CGGG- BE8D(7)	16420	00500	2.7v 29	1900	1,2,3,4,5,6,7,8		Gm Em*
1203/7C4	6.3v .15a	FE8B(16)	60040	02500	0	-	1,8		Em*
1204 /7AB7	6.3v .15a	CGGG-	36421	25000	2v	1150	2,4,7,8		Gm*
1206	6.3v .3a	BE8D(11)	62301 64310	24500 22500	17	-	1,8	Tetrode #1 #2	Em Em*
1221	6.3v .3a	BE8D(15)	64322	50010	18	-	1,6	G Cap	Em*
1223	6.3v .3a	BE8D(15)	06432	05210	18	-	2,7		Em*
1229	2v .06a	EGAG- BE8D(30)	64350	00010	3v 10	400	1,4		Gm Em*
1230	2v .06a	EGGG-	64150	00000	10v	570	1,4		Gm*
1231	6.3v .45a	BGGG- BE8D(18)	64320	12500	.5v 7	3600	1,8		Gm Em*
1232/7G7	6.3v .43a	BGGG- BE8D(17)	64320	12500	1.1v 8	2800	1,8		Gm Em*
NY1269	12.6v 1.75a	DGGG- BE8E(5)	63105	00004	0v 28	2500	1,4,5	P Cap	Gm Em*
1273	7.5v .34a	BGGG- BE8D(18)	64320	12500	1.2v 13	1400	1,8		Gm Em*
1276	4.3v 1.1a	BE8D(5)	63150	00000	28	-	1,4		Em*
1280	12.6v .15a	CGGG- BE8D(18)	64320	12500	1.2v 13	1400	1,8		Gm Em*
1284	12.6v .15a	EGGG- BE8D(16)	64320	12500	5v 12	1200	1,8		Gm Em*
1291/3B7	3v .11a	CGGG- BE8D(14)	60000 64100 60000 64100	14500 00500 14500 00500	6v 11	1900	1,4,8	Triode #1 #2 #1 #2	Gm Gm Em Em*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
1293	1.5v .11a	CGGG- BEED(14)	64000	10500	7v 12	830	1,8	5 may short.	Gm*
1299/3D6	3v .12a	EGGG- BEED(12)	64300	10500	8v 11	1300	1,7,8		Em*
1603	6.3v .3a	EGGG- BEED(15)	64322	50010	3v 18	775	1,6	G Cap	Gm*
1609	1.1v .25a	EGAG- BEED(22)	64135	00000	0v 15	430	1,5		Em*
1610	2.5v 1.75a	BEED(8)	64135	00000	31	-	1,5		Em*
1611	6.3v .7a	BEED(9)	06431	05200	24	-	2,7		Em*
1612	6.3v .3a	CGGG- FEED(17) EED(22)	06432 26431 06242	05210 05200 05210	3.6v 4.7v 8	425	2,7	G Cap. - Osc. " " Amp.	Gm*
1613	6.3v .7a	CGGG- BEED(9)	06431 06431	05200 05200	1.6v 24	1650	2,7		Em*
1614	6.3v .9a	BGGG- BEED(8)	06431	05200	3v 14	3750	2,7		Gm*
1619	2.5v 2a	DGGG- BEED(5)	06431	05200	1.4v 32	2000	2,7		Em*
1620	6.3v .3a	CGGG- BEED(30)	06432	05210	4.4v 10	775	2,7	G Cap	Gm*
1621	6.3v .7a	CGGG- BEED(9)	06431	05200	1.6v 24	1650	2,7		Em*
1622	6.3v .9a	BGGG- BEED(8)	06431	05200	2.9v 14	3800	2,7		Gm*
1623	6.3v 2.5a	EGGG- BEED(6)	60160	00004	0v 28	1400	1,4	P Cap	Gm*
1624	2.5v 2a	DGGG- BEED(6)	63105	00004	1.5v 18	2500	1,5	P Cap	Em*
1625	12.6v .45a	DGGG- BEED(7)	60310	25004	5v 18	2400	1,7	P Cap	Gm*
1626	12.6v .25a	EGGG- BEED(6)	06401	05200	15v 21	1350	2,7		Em*
1629	12.6v .15a	FGGG- BEED(13)	06031 06431	05200	-	-		Eye Open Closed	Em*
1631	12.6v .45a	BGGG- BEED(8)	26431	05200	2.9v 14	3800	2,7		Gm*
1632	12.6v .6a	BGAG- BEED(6)	06431	05200	1.4v 7	5650	2,7		Em*
1633	25v .15a	CGGG- BEED(13)	00014 14200 00014 14200	25600 05600 25600 05600	4.9v 10	1650	7,8	Triode #1 " #2	Gm*
1634	12.6v .15a	BGGG- BEED(20)	20014 24100 20014 24100	25600 25600 25600 25600	.9v 14	850	7,8	Triode #1 " #2	Gm*
1635	6.3v .6a	BGGG- BEED(13)	06410 06001 06410 06001	05200 45200 05200 45200	0v 21	550	2,7	Triode #1 " #2	Gm*
1642 /2C21	6.3v .6a	BGGG- BEED(13)	62014 62400 62014 62400	25000 25010 25000 25010	8v 16	900	1,7	Triode #1 " #2-G Cap	Gm*
1644	12.6v .15a	BGGG- BEED(11)	12203 22143 12203 22143	65400 65000 65400 65000	.8v 21	1350	6,7	Pentode #1 " #2	Gm*
1851	6.3v .45a	BGGG- BEED(19)	06432	05210	1.6v 5	3200	2,7	G Cap	Em*
1852	6.3v .45a	BGGG- BEED(19)	06212	35400	1.6v 5	3175	2,7		Em*
1853 /6AB7	6.3v .45a	CGGG- BEED(16)	06212	35400	2v 8	2100	2,7		Gm*
2050	6.3v .6a	GEED(4)	06401	25200	0	-	2,7	Thyratron	Em*
2051	6.3v .6a	GEED(4)	06401	25200	0	-	2,7	Thyratron	Em*
5516	6.3v .65a	CGGG- BEED(6)	06301	05400	8.6v 32	2500	1,2,4,6,7	P Cap	Gm*
CK5517	0	GEED(8)	00020	02004	-	-	1,2,3,5,6,7	P Cap	Em*
5556	4.3v 1a	EGGG- BEED(9)	64150	00000	4.5v	600	1,4		Gm*
5591	6.3v .15a	DGGG- BEED(9)	12654	32000	.9v	2650	2,3,4,7		Gm*
5608-A	2.5v 2a	EGGG- BEED(9)	62021 64120 62021 64120	45000 25000 45000 25000	2.2v 18	975	1,7	Triode #1 " #2	Gm*
5610	6.3v .15a	DGGG- BEED(7)	42654	10000	6v 18	2500	1,3,4,5		Gm*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
5618	6.3v .23a	DGGG- BEED(7)	64320	15000	6v 11	1900	1,5,7		Gm*
5633	6.3v .15a	BGGG-	22163	50004	2v	1500	4,6	P Cap	Gm*
5634	6.3v .15a	BGGG-	22163	50004	2.3v	1900	4,6	P Cap	Gm*
5635	6.3v .45a	BGGG-	10600 01604	54200 50200	1.5v	2425	3,6		Gm* Gm*
5636	6.3v .15a	BGGG- BEED(25)	12524	63000	1v 15	1100	2,3,6,8		Gm* Em*
5637	6.3v .15a	BGGG-	41652	00000	2v	1700	3,4		Gm*
5638	6.3v .15a	BGGG-	21635	40000	3v	2000	3,4		Gm*
5639	6.3v .45a	BGGG-	12624	53200	2.9v	3825	2,3,4,6,8		Gm*
5640	6.3v .45a	BGGG-	46352	10000	11v	3000	2,4		Gm*
5642	1.1v .2a	FEED(30)	65000	00004	0		1,2	P Cap	Em*
5645	6.3v .15a	BGGG-	42615	00000	5v	1700	3,5		Gm*
5646	6.3v .15a	BGGG-	42615	00000	1.5v	1500	3,5		Gm*
5654	6.3v .175a	BGGG- BEED(12)	12654	32000	2v 13	3000	2,3,4,7		Gm* Em*
5670	6.3v .35a	BGGG- BEED(9)	60000 62140 60000 62140	41250 00050 41250 00050	2v 17	3100	1,9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5672	1.1v .05a	CGAG- EEED(14)	43615	00000	6.4v 9	425	3,5		Gm* Em*
5676	1.1v .12a	CGAG- EEED(16)	46150	00000	6.9v 6	1025	2,4		Gm* Em*
5677	1.1v .06a	CGAG-	46150	00000	9.5v	425	2,4		Gm*
5678	1.1v .05a	BGGG- EEED(15)	43615	00000	1v 12	700	3,5		Gm* Em*
5679	6.3v .15a	FEED(14)	62200 62400	42500 22500	-	-	1,4,8	Diode #1 " #2	Em* Em*
5686	6.3v .35a	BGGG- BEED(11)	01265	34000	1v 14	2500	1,3,4,5,6,8,9		Gm* Em*
5687	12.6v .45a	BGGG- BEED(5)	00256 41256 00256 41256	21040 20000 21040 20000	5v 16	5000	4,5,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5691	6.3v .6a	BGGG- BEED(24)	02014 14202 02014 14202	25600 05600 25600 05600	.4v 10	1025	7,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5692	6.3v .6a	DGGG- BEED(9)	02014 14202 02014 14202	25600 05600 25600 05600	3.5v 17	1650	7,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5693	6.3v .3a	CGAG- BEED(14)	06212	35400	3.2v 17	1050	2,7		Gm* Em*
5694	6.3v .8a	BGGG- BEED(10)	26410 06001 26410 06001	05000 45200 05000 45200	0v 18	1500	2,7	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5702	6.3v .2a	BGGG- AEED(17)	43652	21000	1.9v 10	3175	3,4		Gm* Em*
5703	6.3v .2a	BGGG- BEED(8)	40651	20000	3.6v 13	3175	3,4		Gm* Em*
5718	6.3v .15a	BGGG-	10602	50400	3.9v	3475	3,6		Gm*
5719	6.3v .15a	BGGG-	10602	50400	1.3v	1725	3,6		Gm*
5725	6.3v .175a	BGGG- BEED(26)	12654	32000	1v 8	2200	3,4		Gm* Em*
5726	6.3v .3a	FEED(13)	22562 24562	04000 02000	-	-	3,4	Diode #1 " #2	Em* Em*
5727	6.3v .6a	GEED(4)	12652	42000	0	-	3,4,5,7		Em*
5731	6.3v .15a	CGAG-	64152	00000	3.2v	1425	1,4		Gm*
5732	6.3v .3a	EGG-	06432	05210	2.7v	925	2,7	G Cap	Gm*
5744	6.3v .2a	BGGG-	46512	00000	.6v	2525	2,3		Gm*
5749	6.3v .3a	BGGG- BEED(12)	12654	32000	1v 18	2075	3,4		Gm* Em*
5750	6.3v .3a	BGAG- BGGG- EEED(20) BEED(8)	22654 12650 22654 12652	31000 42000 31000 42000	0v 2v 6 13	950 4500	3,4	Amp. Osc. Amp. Osc.	Gm* Gm* Em* Em*
5751	12.6v .175a	CGAG- BEED(33)	00265 41265 00265 41265	41200 00200 41200 00200	1.5v 7	900	4,5,9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em* Em*
5755	12.6v .18a	BGGG-	42165 02065	02000 12400	0v	950	4,5,9	Triode #1 " #2	Gm* Gm*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
5763	6.3v .75a	BGGG- 3EBD(9)	40265	32110	1v 16	4000	4.5, 8, 9		Gm* Em
5784	6.3v .2a	BGGG-	43652	21000	1.1v	2050	3.4		Gm*
5812	6.3v .65a	DGGG-	12654	30000	8v	2700	3, 4, 7		Gm*
5814	12.6v .175a	CGGG- " BEBD(9)	00265 41265 00265 41265	41200 00200 41200 00200	2.5v 16 - -	1700	4, 5, 9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
5824	25v .3a	DGGG- BEBD(6)	06431	05200	16.9v 9	2500	2, 7		Gm* Em
5829	6.3v .15a	FEBB(13)	02605 42605	42000 02000	-	-	3, 5	Diode #1 " #2	Em* Em*
5840	6.3v .15a	BGGG-	12624	53200	1.9v	2525	2, 3, 4, 6, 8		Gm*
5844	6.3v .8a	BGGG-	04651 40650	02000 12000	4.1v	2150	3, 4	Triode #1 " #2	Gm* Gm*
5879	6.3v .15a	EGGG- BEBD(30)	10265	03420	3v 12	650	4, 5		Gm* Em
5881	6.3v .9a	BGGG- BEBD(8)	26431	05200	2.9v 13	3800	2, 7		Gm* Em
5897	6.3v .15a	BGGG-	10602	50400	2.9v	3675	3, 6		Gm*
5899	6.3v .15a	BGGG-	12624	53200	1.9v	1925	2, 3, 4, 6, 8		Gm*
5900	6.3v .15a	BGGG-	12624	53200	1.9v	1925	2, 3, 4, 6, 8		Gm*
5902	6.3v .45a	DGGG-	12624	53200	12.8v	2650	2, 3, 4, 6, 8		Gm*
5904	25v .045a	CGGG-	10602	50400	9.3v	1275	3, 6		Gm*
5906	25v .045a	BGGG-	12624	54200	1.4v	3125	2, 3, 4, 6, 8		Gm*
5907	25v .045a	CGAG-	12624	53200	1.6v	1875	2, 3, 4, 6, 8		Gm*
5908	25v .045a	CGAG-	12624	53200	3.2v	1125	2, 3, 6, 8		Gm*
5910	1.5v .05a	CGGG-	54300	16000	3.5v	575	1, 5, 7		Gm*
5915	6.3v .3a	EGAG- CGGG- EEBD(18)	02654 12654 22654	31000 32000 31000	0v 3.5v 6	750	3, 4	Amp. Osc. Amp.	Gm* Gm* Em
5916	25v .045a	CGGG- CGAG- BEBD(7)	12650 12624 22614	42000 53200 22614	15 3.9v 4.2v	1000 475	2, 3, 6, 8	Osc. Grid #1 " #3	Em Gm* Gm*
5931	5v 3a	AEBB(5)	06040 06000	00500 40500	- -	-	3, 8	Plate #1 " #2	Em* Em*
5932	6.3v .9a	BEBD(8)	06431	05200	14	-	2, 7		Em*
5963	12.6v .15a	CGGG- CGGG- BEBD(9)	00265 41265 00265 41265	41200 00200 41200 00200	5v 17 -	1750	4, 5, 9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
5975	6.3v .175	DGGG-	42165	00000	6.4v	2525	4, 5		Gm*
5977	6.3v .15a	CGGG-	10602	50400	6.9v	2850	3, 6		Gm*
5987	6.3v .45a	CGGG-	14642	50400	28.5v	1175	2, 3, 4, 6, 8		Gm*
6005	6.3v .45a	DGGG- BEBD(7)	12654	31000	2v 24	2600	1, 3, 4, 7		Gm* Em
6072	12.6v .175a	CGGG- " BEBD(15)	00265 41265 00265 41265	41200 00200 41200 00200	2.5v 14 -	1000	4, 5, 9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
6080	6.3v 2.5a	DGGG-	02014 14202	25600 05600	39.9v	2150	7, 8	Triode #1 " #2	Gm* Gm*
6082	25v .6a	DGGG-	02014 14202	25600 05600	39.9v	2150	7, 8	Triode #1 " #2	Gm* Gm*
6084	6.3v .3a	CGGG-	30265	40210	3v	1100	4, 5		Gm*
6085	12.6v .3a	CGGG-	00265 41265	41200 00200	3v	1650	4, 5, 9	Triode #1 " #2	Gm* Gm*
6086	20v .11a	BGGG-	31256	40020	1.6v	5600	4, 5		Gm*
6111	6.3v .3a	BGGG-	00602 41620	51400 50000	4.9v	3175	3, 6	Triode #1 " #2	Gm* Gm*
6112	6.3v .3a	CGGG-	00602 41620	51400 50000	1.9v	1550	3, 6	Triode #1 " #2	Gm* Gm*
6135	6.3v .175a	EGGG- BEBD(9)	40564	12000	4.8v 15	1375	1, 3, 4, 5		Gm* Em
6136	6.3v .3a	BGGG- BEBD(20)	12654	32000	.8v 9	2525	3, 4		Gm* Em
6137	6.3v .3a	CGGG- BEBD(15)	06212	35400	1.8v 15	1250	2, 7		Gm* Em
6145	6.3v .6a	BGGG-	64320	12500	0v	5650	1, 8		Gm*

TYPE	FIL.	A - E	F - J	K - O	BIAS	Gm	SHORT	NOTE	
6146	6.3v 1.25a	BGGG- BEED(6)	26301	05004	10v 6	4500	1,2,4,6,7	P Cap	Gm*
6159	25v .3a	BGGG- BEED(6)	26301	05004	10.4v 6	4400	1,2,4,6,7	P Cap	Gm*
6169	6.3v .15a	BGGG-	14622	54100	1.2v	3825	1,2,3,4,5,6,7,8		Gm*
6201	12.6v .15a	CGGG- BEED(8)	00256 41256 00256 41256	41200 00200 41200 00200	1.9v 24	2475	4,5,9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
6205	6.3v .15a	BGGG- BEED(11)	12524	63000	.8v 15	3600	2,3,6,8		Gm* Em
6463	12.6v .3a	BGGG- BEED(9)	42156 00056 42156 00056	00000 42100 00000 42100	4.2v 12	3000	4,5,9	Triode #2 " #1 " #2 " #1	Gm* Gm* Em Em
6550	6.3v 1.6a	CGGG- BEED(7)	06431	05200	14v 9	2200	2,7		Gm* Em
6679	12.6v .15a	CGGG- BEED(8)	00256 41256 00256 41256	41200 00200 41200 00200	2v " 24	2200	4,5,9	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
7036	6.3v .3a	EGAG- CGGG- BEED(18) BEED(7)	02654 12654 22654 12650	31000 32000 31000 42000	0v 3.5v 6 15	750	3,4	Amp. Osc Amp. Osc.	Gm Gm Em Em
7193 /2C22	6.3v .3a	DGGG- BEED(7)	06000	05214	0v 24	1900	2,7	P Cap nearest key	Gm* Em
8016	1.1v .2a	GEED(14)	06000	05004	0	-	2,7	1,3,5,8 may short	Em*
9001	6.3v .15a	CGGG- BEED(27)	12654	32000	4v 10	750	2,3,4,7		Gm* Em
9002	6.3v .15a	CGGG- BEED(10)	42654	12000	4.5v 15	1200	1,2,3,4,5,7		Gm* Em
9003	6.3v .15a	EGGG- BEED(12)	12654	32000	2.5v 22	1100	2,3,4,7		Gm* Em
9004	6.3v .15a	FEED(13)	64250	00000	-	-	1,4		Em*
9005	3v .15a	FEED(13)	62455	00000	-	-	1,4,5		Em*
9006	6.3v .15a	FEED(15)	42654	02000	0	-	1,2,3,4,5,7		Em*
XXB	3v .05a	EGGG- " FEED(18)	60001 60410 60001 60410	40500 00500 40500 00500	.9v " 13	700	1,7,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
XXD /14AF7	12.6v .15a	DGGG- " BEED(12) BEED(12)	62001 62410 62001 62410	42500 02500 42500 02500	4v " 10	1650	1,8	Triode #1 " #2 " #1 " #2	Gm* Gm* Em Em
XXFM	6.3v .3a	CGGG- BEED(44) FEED(19)	64120 " 60024 60020	02500 " 42500 12500	1.2v 9 0	600	1,8	Triode " Diode #1 " #2	Gm* Em Em Em
XXL	6.3v .3a	CGGG- BEED(9)	64000	12500	2.4v 14	2000	1,8		Gm* Em

STOP